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ROYAL COMMISSION
ON
CANADA'S ECONOMIC PROSPECTS

HEARINGS

HELD AT

VICTORIA, BRITISH COLUMBIA

November 28, 1955

Volume 14

Monday, November 28, 1956

Victoria, British Columbia

The commission opened its British Columbia hearings in the Council Chamber, City Hall, Victoria, at 10 a.m.

Present:

Mr. W.L. Gordon, Chairman;

Mr. Omer Lussier;

Mr. A.E. Grauer;

Mr. Andrew Stewart;

Mr. Raymond Gushue;

Appearances:

Premier W.A.C. Bennett;
Hon. R.W. Bonner, attorney general;
Mr. J.V. Fisher, deputy minister
of finance;
for the province of British
Columbia.

Mayor C.L. Harrison;
for the city of Victoria.

Mayor George Muir;
Mrs. G.L. Hall, alderman;
for the city of Nanaimo.

Appearances, cont'd.

Mr. E.L. Hodson, president;
Mr. Douglas Greer, member industrial
committee;
Mr. Larry Wright, member industrial
committee;
Mr. J.R. Dudley, executive manager;
for the Nanaimo Chamber of
Commerce.

Mr. G.F. Dunn, president;
Mr. H.L. Crombie, managing secretary;
Mr. A.E. Webb, assistant secretary;
for the Victoria Chamber of
Commerce.

Mr. J.W. Casey, reeve;
Mr. Stuart Brock, councillor;
Mr. John B. Trike, municipal clerk;
for the municipal district of
Saanich.

Mr. J.R. Tolmie;
Mr. J.M. Wardle;
Dr. Charles Camsell;
Mr. Ladner;
for the North West Power
Industries, Ltd.

THE CHAIRMAN: Well, gentlemen, shall we
come to order? Mr. Premier, we are delighted to
be in your province. We have been hearing quite
a bit about British Columbia from one of the
members of this commission for some months now.
I do not think there is very much more that can
be said, but we are looking forward to any other
small contributions which other British Columbians
can add to what Mr. Grauer has been telling us.

We usually proceed without much
formality; at least that is the way we have been

proceeding so far, and if you would care to start things off by presenting the submission of the province, which we will mark as Exhibit 73 for the purposes of the record, we will be very glad to hear you.

MR. BENNETT: Mr. Gordon, I want to say that we are very pleased indeed to have the commission here today, and we are especially pleased to see one of our own British Columbians on your commission in the person of Mr. Grauer.

On behalf of the government of British Columbia, I wish to extend to you and your fellow commissioners a very warm welcome. The government appreciates the opportunity of assisting your inquiry into Canada's economic prospects.

While the object of the inquiry is of undoubted national importance, I hold the view that this examination can prove to be of unusual benefit to the province of British Columbia.

Your commission, doubtlessly, will take note of the changes which 88 years of confederation have seen in the responsibilities allotted respectively to the provincial governments and the government of Canada. In this observation I do not suggest that changed circumstances argue for amendment of our constitution. Changed circumstances do, however, clearly urge the desirability of a more effective fiscal co-operation between the national government and the

governments of the provinces so that they, and their local governments throughout Canada, can properly discharge their increasing responsibilities during Canada's rapid economic expansion.

Because the costs of developing British Columbia, in terms of basic capital requirements -- not to mention annual operating costs -- are invariably and unavoidably higher than those of most other provinces -- a circumstance dictated primarily by geography, topography, and a relatively sparse population -- a recommendation by this commission for an effective partnership between the national and provincial governments to carry out the developmental work at the provincial and municipal level, without which Canada cannot expand, would be of extraordinary importance to British Columbia.

More effective fiscal co-operation between the national and provincial governments can occur in at least two ways: first, in a programme of joint investment by the federal and provincial governments in specific projects of national interest. Second, by variation of existing federal-provincial agreements relating to the division of revenue from personal and corporate income tax and succession duties to give the provinces a clearly adequate share of the revenue produced by these fields of direct taxation.

Although suggestions contained in the

brief refer to the possibility of joint investment, the government of British Columbia feels that a proper division between the federal and provincial governments of the revenues referred to is the answer to the question of how to develop the province and would prefer this method to other means of achieving provincial development.

In submitting a brief at this time, the government wishes it to be recognized that its submissions are preliminary to a more fully documented brief which will be filed with the commission at a later date. The preliminary brief seeks, nevertheless, to provide sufficient material to enable the commission to appreciate the framework within which the government expects that the further development of British Columbia shall take place.

The attorney general, Mr. Bonner, will now present the brief of this province.

MR. BONNER: In embarking upon a brief intended to assist the commission in its examination of Canada's economic potentialities, we have endeavoured to consider, from the point of view of the province of British Columbia, the specific items which, by its terms of reference, the commission is required to study and report upon. Of these, initially an examination of the trend in provincial population would appear to be the most informative, notwithstanding the

possible assumption that population appears to follow rather than precede certain other factors in the economy.

When considering the population trend in this province, and for that matter in Canada, our examination cannot ignore the astonishing growth of the world's population which presently is estimated to be 31,000,000 per year. In the light of this fact British Columbia, as a sparsely populated province in a sparsely populated nation, can expect to be an attractive region for people whose countries are densely inhabited.

In the last decade the population of Canada has increased by 1,250,000 people through immigration. Of these immigrants, over 10 per cent have settled in British Columbia. At the 1951 census it was found that 31 per cent of the province's population had originated from other provinces, 29 per cent had originated in British and foreign countries, and 40 per cent of our population was born in the province itself. During the last decade the population of the province has increased by 37.5 per cent, the greatest percentage rate of increase of all the provincial regions of Canada. Approximately 1,305,000 people live here to-day.

Standard methods have been used in projecting future trends, but our experience in the last decade has shown that no completely reliable formula for projection has been found.

During that period our estimations were consistently low. We are now inclined to compare the experience of British Columbia's development with that of the state of California following the second war, a period during which California led all the Pacific coast states in the rate of its increase of population. In this development, climate, good opportunity for employment, and a high standard of living were the undoubted attractions. Similar circumstances appear to account for the growth of British Columbia during the same period.

In projecting British Columbia's population over the next 20 years, and in estimating the development and needs attendant upon this increase, our projections are based upon minimal figures, although in some cases an endeavour will be made to suggest what maximum figures might reasonably be. Our expectation is that British Columbia, during the next generation, will continue to depend on interprovincial movement and immigration for a large portion of its annual population increase. An important factor is the skilled labour supply it will bring to this province.

The minimum estimate of provincial population for 1975 is 2,278,000, or 75 per cent more than the current year's estimate of 1,305,000. We feel that the maximum estimation of population for the same period would be about 3,000,000.

In that connection I would digress to

draw to the attention of the commission the various tables, figures and maps which are to be found immediately following the table of contents. There is a reference here to figure 1, and that of course is to be found in the appendix portion of the brief itself.

These projections are broken down in the following table by age-groups -- pre-school, school, working force, and principally retired. I will not attempt to read the table, but this table has certain implications.

The minimum estimates indicate:-

(1) That the pre-school group will increase by 77 per cent to 267,000 in 1975. Its ratio to total population will increase only slightly in 20 years.

(2) The school age group will increase to 615,000, or by more than 100 per cent, and will constitute 27 per cent of 1975 population. Elementary and secondary students in public schools are expected to increase from 220,000 in 1955 to 420,000 in 1975, or by 91 per cent. University enrolment will increase by 316 per cent, or from 6,300 in 1955 to 26,200 in 1975.

(3) While the working force group will increase by approximately 70 per cent to 1,180,000, the proportion of the total population within that group will decrease by approximately $2\frac{1}{4}$ per cent to 51.8 per cent.

(4) The principally retired group will

increase by 50 per cent to 215,400, but its per centum of the total population is expected to decline by 1.5 per cent. The decrease in the percentage ratio of this age group to others would reverse the trend experienced during the past three decades.

With maximum population growth, the percentage of pre-school and school-age groups is expected to increase by about $1\frac{1}{2}$ per cent, which will be offset by an equal decrease in the working force and principally retired groups.

Urban and rural population trends.

It is reasonable to conclude that during the next 20 years the present concentration of British Columbia's population in the vicinity of the cities of Vancouver and Victoria should substantially continue. This conclusion, of course, suggests the continued predominance of urban population in the province. While the topographical characteristics of the province appear to preclude the development of major urban communities rivalling those of the two major cities within the next generation, the occurrence of new communities such as Kitimat is anticipated. Improved road and rail communications throughout the interior of the province are expected to accelerate settlement and development of the interior to a greater extent than has been seen during the past decade. The effect of this influence should be seen principally in the major

distribution centres in the province whose rate of development should be greater than would be the case if all the present settled regions of the province were to receive only their proportionate share of the projected population increase. In the Peace river region, where the topography does not restrict settlement to mountain trenches and river valleys, improved road and rail development and the industrial expansion anticipated in the imminent development of the natural gas fields of that region are expected to produce a marked increase in that region's population. Although British Columbia has the highest relative non-farm rural population in Canada outside of Newfoundland, our rural population is generally more concentrated than that of other provinces. This fact contributes to the expected adequacy of labour necessary for the further development of primary industry in rural areas.

Having established a projection of population, examination will now be made of certain industrial factors basic to the economy of the province. Dollar value projections used in this examination are assumed to be constant in the period under review.

Natural resources. (a) Forestry. In Canada the forest industry during 1953 provided direct employment to 363,000 persons; it accounted for 14 per cent of the total net value of national

production, and 35 per cent of the total value of Canada's exports.

In British Columbia the forest industry during 1953 employed 59,000 persons; it accounted for \$477 million or 36 per cent of the total provincial net value of production.

In 1955 the forest industries are estimated to produce \$580 million or 40 per cent of the \$1,459 million estimated as the total of the province's net value of production.

Assuming a minimum population growth, it is anticipated that the forest industries by 1975 will produce \$1,357 million, or 38 per cent of a total net value of production for the province amounting to \$3,579 million.

British Columbia has, on present estimates, 38 per cent of the merchantable timber in Canada. It can eventually attain an annual sustained cut of 18 billion feet board measure. The cut for 1955 is estimated at 6.5 billion feet board measure. By 1975 the annual cut is expected to reach a minimum of 10 billion feet board measure.

Sawmilling in British Columbia, in 1953, manufactured 55 per cent of the lumber produced in Canada, while 65 per cent of national exports of planks and boards and 16 per cent of national exports of pulp and paper originated from this province. As the price of lumber is expected to rise more rapidly than the price

of competitive building materials, a substantial increase in plywoods and hard boards substitution for lumber is expected. Accordingly, from the most reliable estimates, lumber production will increase from 5.3 billion feet board measure in 1955 to an annual rate of 7.5 billion feet board measure in 1975, or by approximately 42 per cent.

The great growth in forest products during the next generation can be anticipated in the form of veneer and plywood and pulp and paper products.

There now appears a short summary of increases in net value of production, as estimated for the period 1955 - 1975. I think the significant portion of this small table are the percentage increases in that period of 20 years. You will notice that the smallest percentage increase relates to logging, where the increase is 55 per cent, while the largest is to be found in pulp and paper products, where the increase is expected to be 327 per cent, or a total average for all of about 134 per cent for this general, diversified industry.

With a minimum population growth the total employment in the forest industries is expected to increase from 73,000 in 1955 to 126,500 in 1975.

The anticipated expansion of industry based upon forestry will require new private capital investment, estimated to rise

annually from \$52 million for the current year to \$106 million in 1975.

In addition, however, considerable public investment should accompany investment of private capital to ensure for the public constantly improving measures for sustained yield, maximum utilization, and conservation of the forests of the province. To this end, several specific suggestions may be made.

(1) A 15 year programme to complete 4,400 miles of major all-weather forest development roads, required for public working circles. This programme would cost approximately \$123 million, and would produce a minimum net additional annual value of forest products of \$195 million.

(2) A programme for increasingly effective fire protection suggests the desirability of an annual expenditure for this purpose of \$2,625,000, or an aggregate expenditure of \$52,500,000 over the next 20 years.

The foregoing suggestions are consistent with the provisions of the Canada Forestry Act; their early implementation would be greatly in the national interest.

Improved utilization of our forestry resources suggest the desirability of --

(1) More intensive pure and applied research to reduce the serious annual loss in forest inventory from insects and

diseases. Losses from forest fires, disease, and insect damage exceed present annual provincial wood consumption in pulp and paper manufacture.

(2) The extension to British Columbia, on a major scale, of basic management and silvicultural studies similar to those being conducted by the federal government in other regions.

(3) Expanded federal-provincial research to reduce wood waste, to encourage additional wood-manufacture industries, and to broaden the utilization of forest products generally. This is of fundamental importance to our economy, because it will promote effective conservation and enable optimum sustained use.

The general importance of the forest industries to the nation may be realized by noting that currently the major portion of federal revenue derived from net taxable corporate income of basic primary and secondary manufacturing industries in this province comes from forest industries.

I turn now to mining. Metal and coal mining have made this industry second only to forestry as a major factor in British Columbia's primary economy. British Columbia produced 18 per cent of Canada's metal production in 1953 and is the prime Canadian

source of lead, tungsten, tin, zinc, antimony, bismuth, and cadmium. The province provides 33 per cent of Canada's silver.

In the same year British Columbia produced, primarily for export, about 1,000,000 tons of iron ore. The establishment of a primary iron and steel industry in southern British Columbia to serve the needs of western Canada is currently a matter of public and private investigation. It appears desirable, particularly if the maximum population estimates are achieved by 1975, that such a basic industry be established as part of a balanced national economy.

In the field of non-metallics, British Columbia's production of asbestos, peat-moss, and sulphur is important. Fuel production, now largely limited to coal, comprised approximately 9 per cent of 1953 Canadian coal production. Coal has suffered from the substitution of natural gas and petroleum, but concentration on coke is promising. Structural materials, entirely for internal consumption, were equal to 8 per cent of Canadian production. The gold-mining industry has declined in relative importance.

Base metals, which depend primarily on world markets, have suffered severe fluctuations in production and employment, although the integrated operations of the Consolidated Mining and Smelting Company have progressively

expanded in mineral by-product fields.

To generalize, mining in this province has developed largely in the southerly 150 miles of the province, a portion of which has been thoroughly explored and developed. Opportunities for greater expansion in all primary mineral fields depend upon the provision of improved access for exploration and development in the central and northern regions of the province. To this requirement, all forms of mining surveys on a vastly increased scale appear necessary if, in the future, mining is to maintain its relative importance in our provincial economy. Existing information suggests that major expansion in copper and asbestos production can be anticipated from the coastal regions extending from Stewart northward to the Alaska highway. Completion of the pioneer road now under construction in that area will open up one of the most promising mining areas of the province. It may also make possible a major smelting industry at Stewart and the utilization of major undeveloped hydro potentials in that area.

Substantial additions in cement production are anticipated in the next few years to meet the rapidly increasing demands for this commodity by our construction industry.

The present labour force in the

primary mining industry is 12,000 and on a minimum growth basis is expected to increase by 25 per cent or to 15,000 in 1975. Net value of such primary production would concurrently increase from \$113 million to \$146 million, or by 29 per cent. The foregoing figures do not reflect increases attributable to petroleum and natural gas, which are to be discussed under the heading of "Energy".

I turn attention now to agriculture. Agriculture is our primary industry of third importance, notwithstanding the fact that less than 3 per cent of the total area of British Columbia is considered arable. Over one-half million acres of land with potentially high productivity may be brought into cultivation, in addition to that already in use, if major public investment is provided for clearing, irrigation, drainage, dyking, and access roads.

The normal increase in acreage for the next 20 years should be from the present acreage of 867,000 now in use to 1,120,000 acres. In this period, the normal increase in farm cash income is expected to be \$28 million, while the increase in net value of farm production is expected to be \$21 million.

If public funds are made available for expenditures such as that on the St. Mary river in Alberta or on the Columbia basin in Washington state, the net value of farm

production in this period could be further increased by, say, \$31 million, and farm cash income by \$38 million.

Agricultural development in British Columbia requires a threefold programme.

1. Public investment to provide the basic economic climate in which competitive agricultural products for local consumption and export can be produced. This investment to include:-

(a) Two thousand miles of all-weather gravel access roads in the Peace river, along the northern trans-provincial highway, and in other areas of the province. These roads would have a complementary use in the development of other resources.

(b) Irrigation projects for 400,000 acres of land at a cost of \$75 million.

(c) The reclamation, including dyking and drainage, of 35,000 acres at an estimated cost of \$2 million.

(d) The clearing of 154,000 acres of land at a cost of \$10 million.

2. To encourage farming as a permanent and full-time occupation, long-term, low-

interest loans to farmers would appear necessary. This type of lending is available in the state of Washington, where rates of interest are materially below those offered by the Canadian farm loan board. In addition capital repayments, which may take place for periods up to 30 years, may be deferred entirely during the initial years of the repayment period.

3. A national policy of tariff equalization with respect to farm products appears desirable. American agricultural products should face the same tariff rates as Canadian products entering the United States markets. The emphasis, however, wherever practical, should be toward a mutual reduction in the tariff structures.

With adequate social capital development in agricultural land extension, attractive loan terms to farmers, and tariff equalization, a minimum increase of the provincial farm labour force in the next generation would be from 7,000 to 10,000, with an increase of total farm population of from 35,000 to 50,000.

I turn now to fishing. As the fourth primary industry, fishing is estimated to employ 5,000 persons in 1955 and should produce a net value of production of \$30 million. If persons employed in manufacturing or processing were included, the number

employed during 1955, including seasonal employees, is estimated to be 18,000 and the total value of production \$60 million. Approximately 70 per cent of the net value of production is derived from salmon, 10 per cent from herring, 10 per cent from halibut, and 10 per cent from bottom or shellfish.

It is estimated that the net value of production in both the primary and secondary fishing industries can be doubled in the next 20 years. A 40 per cent increase in the fishery labour force would result.

The potentialities of our fisheries suggest the possibility of an increase in the catch of salmon by 100 per cent, herring by 50 per cent, and halibut by 40 per cent during the period of our projection. A realization of these potentialities depends on an expanded national development programme, as follows:-

(1) Organization of new spawning grounds, particularly for sockeye and pink salmon.

(2) Improvement of existing spawning grounds, including control of stream levels.

(3) Intensive research to ensure conservation and expansion of fisheries coincident with construction of hydroelectric dams.

(4) Regulation of the volume of catch and methods of catch on all fisheries.

(5) Intensive exploration of potential offshore fisheries.

(6) Assistance in expansion of domestic and foreign fish markets.

I turn now to energy. Modern industrial development is the measure of man's reliance upon energy other than that furnished by himself.

The beginning of the industrial revolution depended for its energy upon fossil fuel, namely coal, and to a limited degree upon animal fat.

Modern industrial requirements have expanded the reliance upon fossil fuels to include petroleum and natural gas, to which must be added increasing dependence upon hydro-electricity.

With minimum population growth, anticipated per capita consumption of energy, in short tons of coal equivalents, is expected to increase from 7.4 tons in 1953 to 21.4 tons in 1975. This is a 190 per cent increase per capita. In 1953 coal supplied 18 per cent of the energy, petroleum 38 per cent, and water power 44 per cent. It is anticipated that by 1975 coal will supply 2.1 per cent of the energy, petroleum 20.6 per cent, water power 73.8 per cent, and natural gas 3.5 per cent.

Total short tons of coal equivalents would increase in quantum from 9,107,000 in 1953 to 48,710,000 in 1975.

I should only digress to point out to the commission that in the few days which have intervened between the preparation of this brief and its presentation this morning, we have seen an announcement by the federal power commission of the United States of the opening of a vast new industry based upon the exploitation of Peace River natural gas.

THE CHAIRMAN: I noticed on page 8 that you were projecting the imminent development of natural gas, and it seems that that projection has come true.

MR. BONNER: The assumption that reliance upon coal will decrease in quantum omits possible utilization of the major Peace River coalfields in the petro-chemical industries which are likely to be established in that area.

The hydroelectric potential in this province on the basis of detailed surveys and preliminary estimates is 25,000,000 horsepower.

Perhaps you would turn to the first map at the back of the brief, which sets out in graphic form the subject matter of this portion of the brief. The geographical sections of this map have been summed up in the text in the corner, which is a breakdown, in which it is

stated that the presently developed horsepower totals 2,653,000 while the undeveloped potential horsepower totals 22,913,000, or a grand total of developed and undeveloped horsepower in this province of 25,566,000.

I draw your attention to the figure which is used in the brief, 2,246,000 horsepower in the next sentence. That was the figure as at December 31, 1954, which illustrates the pace at which this development is growing.

MR. GRAUER: Does the 25 million horsepower include anything for the Peace river area?

MR. BONNER: That potential is not substantially known and has not been taken into account.

MR. GRAUER: That would be extra, then?

MR. BONNER: Yes. That area is still integrated on the map. This might be another example to show that our estimate is low.

Installed hydro stations presently produce 2,246,000 horsepower. Installation per 1,000 population of 1,775 horsepower in British Columbia is the highest of any province in this dominion.

The availability of an abundance of relatively low-cost hydroelectric power has played a major part in the development of our

integrated mining and smelting industries and of our forest industries. It is anticipated that one-half of the present hydroelectric potential, or approximately 12.5 million horsepower, will be utilized by 1975. This would mean a 457 per cent increase over present use. For the purpose of illustrating that development I would draw attention to figure 2 at the end of the brief, which is a projection graphically of the subject matter which has just been covered.

Hydroelectric development to date has concentrated on the single and step development of those individual sites that could be expanded as the power market increased. It is anticipated that further development, particularly in the Fraser river system, will follow the multiple-use trend of the American Columbia river basin, in which economic irrigation of farm lands is concurrent with hydroelectric generation. However, major single and step industrial developments, similar to Kitimat, for electrosmelting or electrochemical industries, are expected and will both attract and require substantial capital investment.

This province has seen private capital develop power concurrently and harmoniously with the provision of power by the British Columbia Power Commission. This pattern is expected to continue substantially unaltered, with rural electrification being supplied in the

main by the British Columbia Power Commission to complement the development by private industry of power facilities serving the mainland and Vancouver island.

Affecting the future of hydro-electric development in British Columbia are the requirements of:-

(1) Concentrated hydrometric, meteorological, and topographical surveys and studies of potential hydropower sites.

(2) Research for practical means to prevent resource losses, particularly of fisheries, in the development of hydroelectric sites.

(3) Provincial representation on national and international commissions dealing in any way with the rivers of British Columbia.

THE CHAIRMAN: Our terms of reference are reasonably broad, but I do not know if they go quite that far.

MR. BONNER: I am sure in your examination of the general scene, nothing could be too broad.

Manufacturing. It is desirable to draw attention specifically to the manufacturing industry of the province, notwithstanding that this phase of the economy cannot be considered apart from the four basic industries previously examined.

It is, of course, desirable from

the standpoint of attracting population and realizing the maximum return from our materials and labour that we should within Canada, and from our point of view within the province of British Columbia, impart the highest utility to our natural products before selling them on the world's markets.

For example, over the years we have seen the decline of the export of sawlogs in favour of the export of fine lumber, plywood, various types of pulp products, newsprint, and fine papers.

This example illustrates the fact that the higher the degree of utility imparted to our raw materials, the greater the return to the country. Therefore manufacturing, our secondary industry, is to be encouraged as a matter of policy.

In recent years manufacturing in British Columbia has accounted for 45 per cent of the total net value of production of the commodity-producing industries. In Canada as a whole, manufacturing accounts for 54 per cent of the total net value of production. Only Ontario with 70 per cent and Quebec with 64 per cent of total net value of production from manufacturing exceed British Columbia. The 1951 census indicated the percentage of labour force engaged in manufacturing as Ontario 32.65 per cent, Quebec 30.78 per cent, British Columbia 23

per cent; and for other provinces the average is approximately 13 per cent.

British Columbia manufacturing over the 15 years from 1939 to 1954 has experienced rapid growth. Manufacturing net value of production, in constant dollars, increased by 192 per cent. Employment in manufacturing over the same period increased by 123 per cent. Increased labour productivity per employee is noteworthy.

Figure 3 reveals that the past growth rate in the net value of manufacturing production, while not as high as in the primary forest industries, has been higher than the rates of growth in the other primary industries. However, manufacturing based on forests constitutes the largest proportion.

The 16 major manufacturing industrial groups are listed in order of importance in table 2. You will note by an examination of table 2, which is to be found at page 33, that we have wood products and paper products as the first two items of importance. A number of others follow in order of economic importance. Actual net value of British Columbia manufacturing production was \$418 million in 1948. In terms of constant 1955 dollars, the net value of manufacturing production in British Columbia is estimated at \$720 million in 1955 and \$1,903 million by 1975.

If past experience is to be deemed

as a reliable index, then probable future trends may be equal to those indicated in table 2.

It is significant that practically all British Columbia manufacturing exports fall within the resource-based group. A few products of iron and steel -- chain saws and diesel engines -- are exported, but percentagewise they are not presently of consequence.

I turn now to general economic growth. As a result of projected population increase, and an examination of the likely development of forestry, mining, agriculture, fisheries, and secondary industry attendant upon this general development, it is possible to estimate the general anticipated economic growth of the province for the next 20 years. This estimation is based primarily, however, upon the minimum population growth over this period.

We examine first the labour force. An over-all increase is anticipated of 80 per cent by 1975. You will see that broken down by primary groups of occupation: agriculture, logging, fishing and mining. Then there are the secondary industries, which would bring a grand total increase in the labour force of 359,000 or 80 per cent by the year 1975.

I examine now the net value of production. The product of commodity industries, exclusive of services, should increase by 145 per cent, from \$1,459 million in 1955 to \$3,579

million in 1975. I should reiterate here, in case the point may have been overlooked, that once again we are using constant dollars in our projections.

The increase would be substantially greater in secondary than in primary activities and should reflect a healthy and higher over-all degree of manufacturing coincident with greater use of the basic resources. Here we have examined under primary and secondary industry the value increase in millions of dollars, and the net increase in value of production percentage-wise, which shows a 145 per cent increase in this period, or a total of \$2,120,000,000 dollar-wise.

Now as to retail sales, the total increase is 133 per cent and the per capita increase is 34 per cent.

Personal income. This income is expected to increase at an annual rate of 4 per cent during the first decade and $4\frac{1}{2}$ per cent during the second decade, or approximately from a total of \$1,930 million in 1955 to \$4,500 million in 1975.

Per capita personal income is estimated to increase by 34 per cent coincident with a 75 per cent rise in total population; that is to say, from \$1,479 in 1955 to \$1,985 per capita in 1975.

Additional increases exceeding 50

per cent during the next 20 years in the manufacturing labour force, net value of production, and total personal income should be anticipated if the population growth were to approximate the maximum estimate of 130 per cent.

I turn now to trade. Related to the factors involved in the economic growth of the province are the continuing problems arising out of our internal and external trade. These problems may be expressed as fourfold:

(1) The limited nature of the internal British Columbia market for her own products because of her relatively small population.

(2) The shipping distance and incidental freight cost disadvantages to the populous central provinces of Canada.

(3) The need to market most of British Columbia's products in competitive foreign world markets, and the necessity, because of Canadian tariff policies, to buy most manufactured goods from central Canada.

(4) The need to maintain foreign purchasing power on a dollar currency basis, notwithstanding the marketing of our products to other than dollar countries.

On the basis of industrial development with minimum population growth anticipated, the dependence of British Columbia on foreign export for at least 40 per cent of the primary and secondary resource products is expected to

continue in 1975. This dependence on foreign markets would be reduced to approximately 35 per cent if the maximum population growth were achieved.

Principal British Columbia exports are lumber, wood pulp, and paper products; mineral products, such as refined metals and concentrates, chemicals, and fertilizers; fish products that are primarily processed; and agricultural products, such as apples, soft fruits, and wheat.

Principal foreign markets during 1954 are set out here.

United States	\$407,000,000
United Kingdom	107,000,000
Japan	21,000,000
Australia	13,000,000
Union of South Africa	8,000,000
Belgium	5,000,000
All other countries	48,000,000
	<hr/>
	\$609,000,000

Notwithstanding the potentials inherent in an improved Oriental market, our estimates have been restricted to those world markets with which trading has been normal in the past.

Estimates of total imports through British Columbia customs ports in 1954 are:

United States	\$210,000,000
United Kingdom	47,000,000
Japan	9,000,000
Brazil	7,000,000
Colombia	7,000,000
Fiji	6,000,000
West Germany	5,000,000
All other countries	48,000,000
	<hr/>
	\$339,000,000

With either the minimum or maximum population growth the development of secondary industries should supply to British Columbia many of the goods now imported from either domestic or foreign markets. Although it will take many years before a relatively balanced economy can be achieved, every effort is required to lessen the dependence of British Columbia on products originating from distant domestic or foreign markets. Reconsideration of national and international trade policies is therefore urged better to meet the nature of British Columbia's economy.

Matters for consideration should include:

(1) A freight rate structure that will facilitate the marketing of British Columbia products in Canadian markets.

(2) The expansion of international trade facilities and ready convertibility of currency exchange.

I turn now to social capital.

The anticipated economic development of British Columbia poses tremendous problems in the provision of social capital for the orderly extension of those services furnished by the government. Basically, British Columbia for better than two-thirds of its area, is still in a pioneer stage. The thought occurred to me this morning, and I find that from one-half to 1 per cent of our total area is within organized territory; that is, in cities, towns and municipalities. The balance is unorganized. The dramatic development of our economy presumes the steady influx of private capital. The provision of public moneys, however, requires deliberate study and the proper rearrangement of existing federal-provincial fiscal agreements, and, if necessary, as ancillary to such provisions a federal programme of participation in public investment related to those economic activities responsible for major portions of federal revenue. With this thought in mind, the following submission was made at the federal-provincial conference held in Ottawa on October 3rd, 1955:-

"(a) Arterial highways.

The further economic development of Canada is in large part dependent upon the provision of adequate transportation and communication. For a long time

transportation meant rail and water facilities and involved large-scale public investment by Canada. However, arterial highways have now become increasingly important to national development and communication, and have in many cases superseded transportation by rail and water. Without a system of first-class arterial highways to supplement the main access roads into economically useable natural resources, competitive resource development is impeded. Arterial roads are now a prerequisite to development and settlement.

While roads are constitutionally a provincial responsibility, the government of Canada has recognized that highway construction has become a matter of national concern. In 1919, under the Canada Highways Act, the federal government provided \$20 million in grants to the provinces for the construction and improvement of roads. In 1949 the Trans-Canada Highway Act authorized the federal government to enter into agreements with the provinces to share in the cost of construction

by the provinces of the connecting links of the trans-Canada highway. Under these agreements the federal government shares to the extent of 50 per cent of approved costs.

British Columbia submits that highways which serve to develop the country and thereby add to the gross national produce are now matters of national concern and should be financed jointly by the federal and provincial governments; that participation by the federal government should not be confined to the trans-Canada highway but should also be extended to an approved main trunk highway development programme in the provinces; that federal participation should be based on a formula which will make allowance for topographical and other conditions which contribute to higher construction and maintenance costs and to a larger road mileage; and that the Trans-Canada Highway Act be amended to provide for a retroactive increase in the federal share of the costs based upon the said differential.

(b) Pioneer Roads.

In addition to federal financial participation in the construction of main trunk highways, it is submitted that federal assistance to provide new access roads to undeveloped mining and forest resources is essential. At the dominion-provincial conference on reconstruction in 1945, the federal government offered to enter into agreements with the provinces to provide such assistance. The importance of pioneer roads to areas which require to be opened up, whether for settlement or for the development of resources, cannot be overemphasized. Considering the economic and financial interest of the government of Canada in the conservation and development of the basic resources of British Columbia, it is submitted that the province is entitled to substantial federal assistance for the construction of pioneer roads.

(c) Conservation of Natural Resources.

The economy of British Columbia, like that of some other provinces, is almost wholly dependent upon the

d development of its natural resources. The sale of its natural products in their various forms in the markets of the world is an important contributing factor to the national income of Canada and to federal revenues; in fact, by far the major portion of the revenues from the exploitation of provincial natural resources is paid to the federal government. It is therefore in the national interest that these resources, particularly of forestry and agriculture, be conserved and protected.

 Accordingly, British Columbia recommends that this conference agree in principle that the federal government will share equally with the provinces in the costs of conservation of their basic resources. It further recommends, with respect to agriculture, that the provisions of the Prairie Farm Rehabilitation Act be broadened to include agricultural reclamation, irrigation, dyking, drainage, erosion control, flood control, and land clearing and be made applicable to the province of British Columbia."

That is a quotation from the brief presented at the federal-provincial conference.

For purposes of this submission, the need for essential provincial and municipal road facilities are summarized and projected on map No. 2. Apart from being very colourful, map No. 2 sets out the requirements of this province with respect to communications. Let me summarize the effect of the data set forth on that map.

(1) Present provincial arterial roads and bridges, including trans-Canada, show a total of 4,040 miles, of which 2,086 miles require construction or reconstruction and paving. Total cost is \$397,500,000, or an average of \$190,000 a mile.

I might say, in terms of that road cost, that the figure is approximately double the cost for the next highest province in Canada, the province of Ontario, which if my memory serves me right is about \$85,000 to \$90,000 a mile for the basic rates.

THE CHAIRMAN: The section going across north of lake Superior would be higher than that, would it not?

MR. BONNER: I am speaking of averages per mile.

(2) Municipal arterial roads. Estimated 20 year requirements are 185 miles of four-lane highways with total cost of \$55,000,000.

(3) Pioneer roads and bridges. Trunk highways into those sections of the province

where no adequate road system exists at the present time. With population growth they will be the arterial roads of the future. They are required to enable economic development. A total of 3,630 miles, of which 3,530 miles require construction or reconstruction. Total cost is estimated at \$498,500,000, or an average of \$141,000 a mile. There is a special reference to table 4 on page 35, in which these several requirements are set out in detail.

(b) Petroleum, natural gas, agricultural, and mining area development roads of 2,000 miles are required. Total estimated cost is \$60,000,000, or about \$30,000 a mile.

(c) Provincial park roads of 255 miles are estimated to cost \$25,000,000, or an average of \$100,000 a mile.

The relationship of public and private investment in British Columbia in the current year suggests that these two sources of capital must be kept in balance if the economy of the province is to continue in its orderly expansion. Estimated capital investment this year is \$585 million, of which 75 per cent or \$436 million is private investment and the balance of \$149 million is public investment.

Of the public investment, \$94 million net is provincial; the current federal estimate is \$36 million; and \$20 million arises from municipal sources.

Based on the minimum population increase of 75 per cent by 1975, the total of provincial and municipal capital for the next 20 years is estimated at approximately \$3 billion.

Capital expenditures on the part of provincial and municipal governments, including those of their commissions and boards, are expected to rise from \$114 million this year to an annual rate of \$200 million by 1975.

Details of new provincial-municipal public investment for the next 20 years are summarized.

There is in addition table 5, in which sources of development moneys are listed. To summarize, under "education institutions" there is an apparent requirement of \$260,200,000; under the heading of transportation and communications there is \$1,239,000,000. Under other natural resource development on page 29 there is \$143,500,000. Our hydroelectric development, and here we refer only to the British Columbia Power Commission, the requirement is \$524,070,000 and this excludes, as the footnote indicates, major hydroelectric developments on the Fraser and Columbia rivers.

For hospital construction the requirement is \$210,169,000; for penal institutions, \$9,200,000; for government buildings, \$13,280,000, and various other expenditures, giving a grand total of \$2,925,764,

or just short of \$3 billion.

The present sharing of this provincial and municipal investment is as follows: the federal share is 2.76 per cent; the provincial share is 73.36 per cent and the municipal share is 23.88 per cent.

Under present federal-provincial fiscal arrangements, it is not to be anticipated that the provincial and municipal capacity to finance the \$3 billion expenditure necessary for the ensuing 20 years of provincial development will be adequate. The present expectation is that investment by Canada in British Columbia may increase from the current annual estimate of \$36 million to, say, \$65 million by 1975. However, it will be readily apparent that without more, this sum will not be of great assistance to that capital development of the province which must be furnished by public funds.

Assuming, however, that public investment shall continue so as to attain the total shown in table 5, private investment in British Columbia may be expected to increase from an annual rate of \$436 million this year to \$1,103 million by 1975. Table 6 on page 39 is illustrative of that situation. In the event of the maximum population projection being attained -- that is, an increase of 130 per cent by 1975 -- provincial and municipal public investment could be expected at an annual

rate of \$300 million, or at a rate approximately 50 per cent higher for most of the major categories. The maximum population would concurrently increase the rate of private investment to, say, \$1,500 million annually by 1975.

Given the extraordinary productivity to Canada of corporate and personal income tax rates in this province under the present fiscal arrangement, Canada's participation to the greatest possible extent in public investment, required in British Columbia would appear to be justified. Public investment, appropriately supplementing private investment, would accelerate substantially the economy of the province and would increase the revenue accruing to the government of Canada. Federal investment in this province would not only be self-liquidating, but also very profitable.

In considering the necessary provision of social capital for the province, the need for providing basic communication has been set out on accompanying map 2. That is the one to which I directed your attention a few moments ago.

Other needs under this heading would include coastal passenger and freight ferry services for which, it is noted, there is no counterpart on the west coast for marine subsidies afforded by Canada to the east coast.

Under the general heading of "Other matters" two subjects are referred to briefly.

Pacific Great Eastern Railway.

British Columbia owns this railway and intends to use it as an instrument of economic development. The northerly and southerly extension will bring two-thirds of the northern hinterland of central British Columbia, by the shortest route, into direct connection with the lower mainland.

Canada's equal participation in the cost of the extensions is deemed justified because the railway will form part of an effective national transportation system, and because precedent was established by Canada's contributions to many similar developments in other provinces and on the St. Lawrence. The important result of the Peace river extension will be the significant reduction in mileages for effective marketing of the agricultural and petrochemical products from natural gas. The railway from Dawson Creek will reduce the mileage by 43 per cent, or from 1,255 miles via Edmonton to 727 miles to Vancouver.

Map No. 3, the last map in the brief, illustrates what is sought in this northerly and southerly extension of the railway. I think it may be fairly pointed out that by the present route from Vancouver to

Dawson Creek by way of Edmonton, you travel a distance equivalent to a rail journey from Vancouver to Brandon, Manitoba, which is extraordinary to say the least.

Rail freight rates. British Columbia suffers adversely from the so-called \$7 million bridge subsidy system, which permits a 1,350-mile haul from Montreal to the prairie market at a rate equal to that which our shippers bear for a haul of 1,100 miles.

The competitive effect on our rail freight structure of low-cost Panama canal rates is of vital concern to our provincial economy. Furthermore, any increase in the intercoastal shipping cost due to artificial national restrictions will be vigorously protested by the province.

May I now conclude, Mr. Chairman. It will be impractical to attempt a summary of projections dealing with population, natural resources, energy, manufacturing, and the several problems which will attend the anticipated economic growth of British Columbia. The subject matter of the brief has been set forth in a summary fashion, which I trust will be of assistance to your commission.

Having indicated the expected extent of provincial development for the ensuing 20 years, I think it may be agreed that the responsibilities of the provincial and

municipal governments in this development are substantial. The proper discharge of these responsibilities is to be found in the measure of public revenues available to provincial and municipal governments during this period. Since by the constitution no other level of government can properly assume responsibility for provincial and municipal development and welfare, failure to arrange the public revenues of Canada to enable provinces and municipalities to carry out their necessary works will amount to a denial of the objectives sought by the fathers of confederation when drafting Canada's constitution.

During the next 20 years British Columbia's expansion, no doubt like Canada's, appears assured. That private development will be great is not to be doubted. That public investment shall keep pace with private development will be the particular concern of the government of British Columbia during this period of great provincial economic expansion.

It is the earnest hope of the government of this province that when examining Canada's economic prospects, your commission will study particularly the roles and responsibilities of the provinces and their municipalities in the development of the nation, and be enabled, as a result of this study, to recommend measures which Canada may adopt to

realize the potentialities which we, as a nation, clearly possess.

THE CHAIRMAN: Thank you, Mr. Bonner. I am sure all of us would like to ask some questions if we may. Would that be agreeable to you?

MR. BONNER: I shall be glad to endeavour to answer some of the questions. It will be appreciated from my side of the table that many of the questions attendant upon the development of this province are not to be answered in detail in some cases. In submitting the brief in this summary form we would hope, as the result of questions which may come from your commission, that our documentation might be particularly pointed to assist your studies.

THE CHAIRMAN: Thank you very much. We will not organize these questions in any way; we will just pop them at you and see how it goes.

Under your population section you anticipate an increase in population on your minimum basis of 75 per cent in 20 years, or on the maximum basis I think it works out at about 130 per cent, which quite obviously will mean a continuance of the highest rate of increase in the country. I presume that includes an expectation that there will be a continuance of migration from the eastern provinces to British Columbia?

MR. BENNETT: That is right; and

we hope to get some of our own Canadians back from the United States.

THE CHAIRMAN: That is something to which this commission has made a small contribution. We have brought quite a number of them back from the United States to work on the research staff, and they hope to stay here.

MR. BENNETT: Perhaps the attorney general can give you an illustration of that.

MR. BONNER: Your technical staff particularly will be interested to learn that the estimates in this population projection are based on the experience of recent years in the rates of fertility, survival and net immigration. These are probably low because in spite of a recent upward trend in fertility and net migration, the average has been used; and constant survival rates have been assumed, but older people are living longer and infant mortality is decreasing. Our experience in that connection in this province is perhaps better than in some other areas of Canada.

In our method, we took the 1954 population and divided it by age, and the number of the survivors over the succeeding years was computed by means of survival ratios based on age-specific mortality rates of the 1951 - 54 period.

Then yearly births were estimated by applying the 1951-54 age-specific fertility

rates to the estimated female population, by age groups.

Net migration into the province -- that is, the excess of immigrants over emigrants -- was computed for each specific age on the basis of the 1951-54 experience. This was done by a comparison of yearly population estimates with projections based on natural increase alone. Migration rates were then established for each specific age and projected along with the other factors each year for the 20 years.

In the maximum estimate, preliminary estimates were derived by applying the California over-all growth experience between 1904 and 1952, which averaged 4.2 per cent.

I think that might illustrate some of the techniques involved.

THE CHAIRMAN: Thank you very much.

MR. STEWART: The net migration into the province has been quite substantial in 1951-54, and that has been carried forward in your projection?

MR. BONNER: That is correct.

MR. STEWART: That means you anticipate that generally conditions in this province will be relatively attractive; and I am not referring only to the climate.

MR. BONNER: That is quite true.

THE CHAIRMAN: On page 10 you give in summary form the anticipate increase in the

forestry industry of this province. The question I would like to ask is this. I think it is in the fourth paragraph where you say that assuming a minimum population growth, it is anticipated that the forest industries by 1975 will produce so much. Did you base the estimate of the increase in the forest industries on the increase in the population, or on the increase in the market for the products?

MR. BONNER: It is an estimation based on a projection of all considerations at the present time. It is not anticipated that the demand for lumber will fall off with the world population increasing at the rate of 31 million per year.

THE CHAIRMAN: So this is based on what you think will be the demand for the products?

MR. BONNER: Could I give you some details here. On a physical basis the anticipated production for 1954 and 1955 was based on monthly returns for the industries concerned. Projections through to 1975 made use of the following tools.

Assumed that the per capita use would decrease but physical use would increase due to increases in population in Canada, increased demand from the United States for British Columbia lumber as reported in the Stanford report may be expected. Historically,

lumber production in British Columbia from 1908 to 1954 has increased by 2.85 per cent annually.

Applying this trend to 1954 production we would expect a production of 8 billion board feet in 1975. We decrease this to 7.5 billion to allow for the general thought that the use of lumber will decrease, and to allow for flattening or a peak at that time. The present experience for coast sawmills is that sawmill waste is chipped and used in the manufacturing of sulphate pulp.

With plywood, the physical projection for plywood assumed that this product will replace part of the demand for lumber. Actually the demand for lumber based on the past 11 years would greatly exceed 7.5 billion, but due to increased costs, substitution of plywood for lumber checks with the Stanford trend.

Finally as to pulp and paper, projections through to 1960 and 1965 for mechanical pulp, sulphate pulp and newsprint based on construction under way on new mills to be producing by 1960; and it is also based on present plans for construction to be completed during the period 1960 - 1965. These projections are only slightly lower than straight line logarithmic trends based on the period 1944 - 1954. Sulphite pulp expansions are not spectacular in British Columbia now, and we follow the Stanford

trend. Other paper trend takes account of the past experience and is mainly for western Canadian anticipated demand. Present low per capita use of paper in other countries is expected to increase. Even the present high per capita use in North America is expected to increase. There is a relationship, as you know, between the development of a country's general economy and the demand set up by an increasing population, and the consumption of paper. Paper is now at its highest per capita rate of consumption in the United States, and the rest of the world is a market yet to be developed by that industry.

It is in that anticipation, I am sure, that the pulp and paper people are investing so much at the present time. The pulp and paper development going on at the present time in this province is the largest single development of that industry at any time in the history of the world.

With regard to logging, the log requirements of the main industries are added to give the total cut. A decrease is anticipated in primary products such as poles, piling, posts, etc. The wood requirements for sulphate pulp are assumed to come wholly from waste. A cut of 10 billion board feet in 1975 is a maximum, and might be decreased due to the wood requirements for other products coming

from so-called waste in sawmilling and veneers and plywood industries.

I hope that will not confuse you too badly.

THE CHAIRMAN: On that subject, I wonder if you could tell me what percentage of the total production of the forest industry of British Columbia is exported, and how much of those exports go to the United States?

MR. BONNER: It appears to be the consensus that 70 per cent of our production is for export to other parts of Canada and to world markets, in all the wood industries.

THE CHAIRMAN: What I was looking for really was how much of that product is exported outside of Canada?

MR. BONNER: We may have to work on that. We have to rely on certain internal figures which are not too reliable. We will take note of that point, however.

THE CHAIRMAN: Am I right in assuming that this tremendous expansion which you predict for British Columbia will depend to a considerable degree on the markets for the forestry industry, plus the extent of the public and private investment that is expected to go with the expansion?

MR. BENNETT: You mean outside markets as well as the Canadian market?

THE CHAIRMAN: Yes. It seems to us that it is important that this commission should do as good a job as it is possible to do in making some assessment of the probable demand in other countries for the various products that Canada has to sell. When you say that you naturally include the forest products of British Columbia. I expect the industry will be able to give us a great deal of information on that.

MR. BENNETT: And if after hearing the industry you need further data, we will endeavour to get it for you.

MR. GRAUER: Do you arrive at a figure of maximum utilization of the forest resources of British Columbia on the basis of sustained yield? What I am thinking of particularly is that stage beyond the 25 years of this projection.

MR. BONNER: We have been very frank in our admissions here. It is difficult enough to go to 20 years, without going beyond that point. I would not like to guess beyond the figures we have arrived at here, because our experience even in a 10 year period shows that our assumptions are modest in terms of the facts which time permits to emerge.

MR. GRAUER: It was the reverse twist I had in mind, from the point of view of production. To what extent has British Columbia the power or the ability to produce forest

products beyond the amounts you have in mind being produced by 1975?

MR. BONNER: We are assuming at the moment a minimum of 18 billion as the sustained annual cut, but that situation could change in a matter of 6 months, perhaps, in terms of technological development. For example, 50 per cent of the tree at the present time goes into various things which are not taken into use and literally goes down the drain. Research will permit us to import a greater degree of utility in the future than is presently possible with our sustained yield.

MR. GRAUER: So you feel that this 1975 projection is well within the productive capacity of the British Columbia forests?

MR. BONNER: That is right. It is only 60 per cent of our maximum.

MR. BENNETT: In our experience with pulp and paper, I think practically 100 per cent of our pulp is exported outside Canada, mainly to the United States.

THE CHAIRMAN: On the next page you say that considerable public investment should accompany the private investment to expand the industry in order to make this increase possible, and you made two suggestions.

I am not clear on the first one. You point out that the programme of 4,400 miles of major, all-weather forest development roads

would cost approximately \$123 million, and that in turn would produce a minimum net additional annual value of forest products of \$195 million. Does that suggest that without these expenditures on roads, no part of that annual increase in forest production would happen?

MR. BONNER: We are speaking here of our requirement for public working circles. This is a necessary development outside of any forest management licence area development in the province. The cost of the public working circles is in terms of roadways put into them by public moneys; and if we do not have that type of investment the relation of the so-called small water to water industry in the province is adversely affected. Furthermore, some of this potential 18 billion feet board measure is based on the bringing into economical access of these regions which are planned to be reached by roads, and those are detailed on page 35, in table 4.

THE CHAIRMAN: I am more or less right, then, I assume, that you feel you have to make these expenditures on these roads if the industry is going to be permitted to expand to the extent which you predict it will?

MR. BENNETT: That is right.

THE CHAIRMAN: On the top of the next page you make three suggestions as to the things that should be done to assist and stimulate this expansion. I wonder if you would

care to amplify those three points a little?

MR. BENNETT: Which point would you like amplified?

THE CHAIRMAN: First of all you say you need more intensive pure and applied research to reduce the serious annual loss in forest inventory from insects and diseases. Should that research be done by governments entirely, or should it be a combination of governments and industry, or should industry take it on?

MR. BONNER: Industry is already assuming a considerable responsibility for research relating to its own objectives. However, the first heading here is a field in which I am instructed the federal government has heretofore accepted responsibility, and is actually a subject matter which might properly require the attention of such organizations as the national research council, in addition to provincial efforts likewise being expended.

I think the future of forestry is too important to be left to private interests alone. We have a very substantial public concern in its developments. The requirements of the market are not always the requirements of the general public, and on that account I think a good deal of governmental responsibility should be assumed in the proper development of that resource.

THE CHAIRMAN: That is exactly what I was looking for, because I want to understand

your thinking and your policy on that point.

MR. BONNER: The premier has drawn to my attention the fact that an appreciation of the principle which I suggested in general terms is to be seen in the management of forestry in this province. There is a considerable area under forest management licence for which industry has naturally a particular responsibility for development, and much of this is being done. However, for a larger area of forest, which is contained in the public working circle, there is a direct public interest and responsibility, and it is in the discharge of that responsibility that this suggestion is of particular significance.

MR. STEWART: My question has to do particularly with research in forestry, but it could be generalized to include other resources as well. What agencies have you yourselves in this province for basic research? You have your own research company, do you not?

MR. BONNER: We have the British Columbia research company. We have a very well developed faculty devoted to forestry at the University of British Columbia, where a good deal of pure thought on the subject is developed from time to time.

MR. STEWART: As a generalization, would you prefer to see the federal government establish its own facilities or use such

facilities as you have?

MR. BONNER: Generally speaking I think it is more satisfactory if the work is done through the province. However, I would not want to see this research discontinued in the face of that suggestion, because there is already a considerable amount of research, as a matter of fact, presently accepted as a federal responsibility, which has to be continued. My suggestion is that it be amplified.

MR. GRAUER: I do not know if everyone of the commission understands the public working circle, which is a considerable part of our system out here. Could we have a few words of elucidation on that?

MR. BONNER: I spent some weeks explaining that not so long ago.

MR. GRAUER: I hope you can cut it down to something less than that.

MR. BONNER: Broadly speaking the forests of the province are managed by the crown. However, under certain circumstances the management of an area may be delegated by licence to a private industry, and that industry in most cases is one of complete integration of the wood producing facilities and modern technology, from the sawmilling to the plywood to the pulp, to the waste and all the rest of it. That is what is known in British Columbia as forest management licence, with responsibility

delegated to a private industry.

For the balance, timber is made available in public working circles, which broadly speaking are drainage areas. A valley is normally, in our topography, the area in which a public working circle may be found. From the access provided by the river to the peaks of the surrounding terrain you have a circle in which individual operators, popularly known as small operators -- which is a fellow with anywhere from \$100,000 to \$100 worth of equipment -- comes in and on the basis of public auction secures the right to cut the timber within that circle.

I do not know whether that is too great an oversimplification, but where the private operator does not come in and secure the right to cut as the result of public auction or one or two other similar arrangements, the alternative is a forest management licence by private industry, which has the responsibility of cutting, planting, providing access roads and, from our point of view, most important the major capital investment for the sustained development of the region. I was going to say "perpetual". That is not exactly true, but it is the indefinite, sustained development of a region; a tree farm, so to speak, on a very large scale.

THE CHAIRMAN: Mr. Premier, we have

a number of other questions to ask. We usually try to have a break about the middle of the morning to give the reporter a chance to ease his hand a little, and if you would approve I think we might adjourn for 10 minutes and then come back and ask more questions.

MR. BENNETT: That is fine.

---Recess.

---After recess.

THE CHAIRMAN: Gentlemen, may we come to order. Mr. Bonner, on page 12 under the heading of mining, you make reference to the establishment of a primary iron and steel industry in southern British Columbia to serve the needs of western Canada.

I wonder if you would be kind enough to amplify what has been said there, to some extent. We are quite interested to know whether there is some real prospect of a primary iron and steel industry developing here within the reasonably short-term future.

MR. BONNER: My advice is that the Consolidated Mining and Smelting Corporation have a very substantial slag pile in the vicinity of their Trail operation, which in itself could be the basis for such an industry in British

Columbia.

However, I would point out that with the export of iron ore from Texada island, we are already sustaining a very large part of Japan's industry in terms of raw material. That ore body, incidentally, was found many years ago, and the export of that ore is not within provincial control.

THE CHAIRMAN: Under whose control is it?

MR. BONNER: The federal government. The establishment of an industry in this province depends upon at least two considerations, in my opinion; first, an appreciation of the extent of the iron ore reserves in British Columbia. There is at the present time a reserve of iron in this province, and my advice is that the extent of these reserves is at present the subject of prospecting and examination on a very large scale by industries in the United States, I think in one case by a Canadian firm, and I think from one source in Europe.

That is the first point, to determine if there is the iron ore here to sustain such an industry, and I think the answer to that question is yes.

The second point is the development of a population here which will guarantee certain minimum markets locally, to give some expectation of stability and make basic financing possible;

and on the anticipated population increase I think that condition is on the point of being fulfilled, if it has not already been fulfilled.

A third consideration, of course, is simply the matter of industry getting around to looking at the problem. That condition I touched upon originally, and it is now in the active stage.

Mr. Gunderson was on a trade delegation to Europe last year. Incidentally he expected to be with us this morning, but unfortunately could not get beyond Vancouver. In the course of his inquiries there was positive interest expressed in two countries, an interest which has since been followed up.

I would not go so far as to make a prediction at this point, but I should be surprised to see the next five years go by without something positive developing in this field in this province.

THE CHAIRMAN: Is the industry dependent upon finding iron ore within the province? After all, presumably it would be located at tidewater.

MR. BONNER: The answer to that is no. It is an additional advantage, but not a prerequisite. There is in the potentialities envisaged in the development of the Taku river in the Yukon, in what is known as the Frobisher

development, the elements of an extensive electro-metallurgical development in that corner of the province. Incidentally there is in that region fine ore showings which would give a local base to the prospects of electro-metallurgy; but more important, that development, as has been the case at Kitimat, combines the positive factors of low cost electricity at tidewater, which is a sine qua non of that type of major industrial development at this point, because there is added to it the relative unlikelihood of the vicinity being developed with the rises in value and the encouragement of population which has been the experience in continental United States during recent years.

Incidentally the Frobisher proposal envisages the harnessing of 4,900,000 horsepower, which is a very formidable block of power.

MR. GRAUER: In the province of Alberta, someone at the hearing in Edmonton in talking about a possible iron and steel industry there, made reference to the tailings at Trail, and I told them to lay off; that was in British Columbia.

THE CHAIRMAN: In the section of the brief dealing with agriculture, at page 14 you refer to this whole question of irrigation and the development of land that is not now in use for agriculture.

We heard a great deal about irrigation

projects in the three prairie provinces, particularly in Saskatchewan and Alberta. In most cases the people who were expressing views on irrigation, or some of them in any case, cautioned the expansion of irrigation projects until markets for the products that were going to be grown on those irrigated lands were reasonably assured.

I wanted to ask whether in the proposals which you are making here the market would be the internal market in British Columbia, or whether the crops in question would be sold elsewhere?

MR. BONNER: I would like to point out first what I think should be a basic distinction between submissions on the question of agriculture in British Columbia when compared with those in the region from which you have just come.

If I am not mistaken, your submissions previously received were based on considerations of a wheat economy, where the problem was one of export, a problem not particularly resolved at the moment; whereas ours is a problem of producing first for an expanding domestic market, and second of producing as well for a quite well established market in northwest Europe, particularly the United Kingdom, in terms of our soft fruits and apples, and finally in terms of that type

of production we find that our producers are in competition with people in the state of Washington, who in very large measure enjoy not merely irrigated lands but lands heavily subsidized by a variety of measures. Then when we produce in effect in one economic unit, despite the 49th parallel, unless there is present in that picture on our side of the border a considerable amount of public investment in agricultural land, the producers are in a relatively non-competitive position with others in the same region who would like to trade in the same market.

THE CHAIRMAN: That is the domestic market?

MR. BONNER: The domestic market, whether or not they compete in the European market as well.

MR. BENNET: Take apples in British Columbia.

THE CHAIRMAN: On the subject of apples, we have been in Nova Scotia.

MR. BONNER: Newfoundland has a problem too, I believe.

MR. GUSHUE: Not in apples.

THE CHAIRMAN: Next may I ask you how you manage to sell apples in Great Britain, whereas Nova Scotia seems to be having great difficulty in doing so?

MR. BONNER: I was going to suggest

that the answer may be salesmanship, but it is not that. The fact is that in recent times we have had a particular reciprocity of trade, for example, involving the provision of steel rails for the provincial railway, the Pacific Great Eastern.

There has been developed between this province and the United Kingdom a very close commercial connection at all levels, for which I think credit should be given to our agent general in London, who has kept the interests of this province very much to the fore in England.

In this connection, too, the lumber industry and the fishing industry have on their own initiative sent trade delegations to that region in recent times, with very marked success. So there has been a combination of public and private effort.

THE CHAIRMAN: And it really has made a difference as far as the export of British Columbia apples is concerned?

MR. BONNER: Yes, indeed.

MR. BENNETT: It has also helped us to get basic steel when there was a shortage. It has helped us materially and is helping us.

MR. GUSHUE: At the top of page 15, dealing with agriculture, there is the suggestion that a national policy of tariff equalization with respect to farm products appears desirable. American agricultural products should face the

same tariff rates as Canadian products entering the United States markets. The emphasis, however, wherever practical, should be toward a mutual reduction.

Is that a deliberate limitation to farm products, or ought the question of tariff policy to be looked at more widely?

MR. BONNER: That is dealing directly with that particular point.

MR. GUSHUE: It is the only reference in the brief; that is why I asked the question.

MR. BONNER: The basic position of British Columbia in terms of international trade can be summed up, I think, probably in two sentences. That is, we sell on the world market, and we buy on the market protected by our tariff structure. So there is a problem presented by those two facets of our trade. I am not here necessarily to propose what the answer may be, but as far as our experiences are concerned the fewer tariffs we have to contend with, the better.

That is of particular significance, for example, in the recent suggestions we have heard with respect to an aluminum industry in this province. We have a considerable aluminum industry here now. If the tariff situation as between Canada and the United States relating to that particular product, to mention only one, were different, the possibility of secondary industry

fabricating aluminum and other metal production would be very different than it is today. If the entry of British Columbia-produced aluminum on special permit, which is one of the possibilities under the United States tariff provisions at the present time, were arranged, I suggest it would be feasible that our aluminium industry might conceivably double in the next few years.

Conversely, when we require in Canada to go and get the machinery with which to carry out our economic expansion, we find that we are buying machines which are protected by a tariff, and which on a per unit basis cost are usually higher than we could get them without that hurdle in our way.

MR. GUSHUE: This, then, is not an intentional restriction just to farm products?

MR. BONNER: I do not want those remarks here to be applied more generally than they appear in the brief. This is a particular consideration relating to agriculture at this point.

MR. GUSHUE: But this is the only point at which that appears in the brief, I think.

MR. BONNER: Yes, page 14.

MR. GUSHUE: I do not think that would necessarily take in tariffs, would it; the expansion of international trade facilities?

MR. BENNETT: That is broad enough for that purpose.

MR. GUSHUE: You intend it to include that?

MR. BENNETT: Where beneficial arrangements could be made between Canada and other nations.

MR. GUSHUE: And where you refer to the emphasis being toward a mutual reduction, how far would you like that mutual reduction to go; to the point of disappearance? Or is that too academic a question?

MR. BONNER: It is pretty academic.

MR. BENNETT: I think if Canada had the whole United States market, Canadian manufacturers would be able to compete. Having only a small market in Canada and having to compete against United States manufacturers is putting Canadian manufacturers at a disadvantage. If we had that whole market without tariffs I believe we could meet United States competition all right.

THE CHAIRMAN: I would like to go back to the specific reference at the top of page 15, where you refer only to agricultural products. We have heard it suggested in other parts of the country that where the United States market is denied to Canadian agricultural producers -- potato growers in New Brunswick and Prince Edward Island are a good example --

MR. BENNETT: In this province, too.

THE CHAIRMAN: -- that if they

are to be denied the United States market, the Canadian market should be denied to the United States producers.

MR. BENNETT: We would argue from a little different angle. We say the same arrangement should be applied to both.

THE CHAIRMAN: That is perhaps a little better way to put it.

MR. STEWART: May I just follow up the references to public expenditures on agricultural development. On page 14 under the heading "Public investment to provide the basic economic climate in which competitive agricultural products for local consumption and export can be produced," you have the (a), (b), (c) and (d) items.

(a) Two thousand miles of all-weather gravel access roads in the Peace river, along the northern trans-provincial highway, and in other areas of the province. These roads would have a complementary use in the development of other resources.

(b) Irrigation projects for 400,000 acres of land at a cost of \$75 million.

(c) The reclamation, including dyking and drainage, of 35,000 acres at an estimated cost of \$2 million.

(d) The clearing of 154,000 acres of land at a cost of \$10 million, all of which adds up to \$87 million. Then you say,

"We did not therefore include the cost of new roads to open up these areas."

MR. BENNETT: They are covered elsewhere.

MR. STEWART: Yes, I know. On page 15 you project an increase in the farm labour force of 7,000 to 10,000, and on page 20 you use the figure 7,000. Again at the top of page 14 you refer to approximately one-half a million acres. For clearing, ditching and irrigation development you have an expenditure, just to bring the land into production, of \$87 million, which would be roughly \$187 per acre on new land, just to bring it into production.

MR. BENNETT: Some of the land is worth \$1,000 an acre when it is in production.

MR. STEWART: You anticipate the kind of markets which will enable you -- ?

MR. BENNETT: In our fruit districts some of our land is worth \$1,000 an acre, but without the water and other facilities it is worth only about \$1 an acre.

MR. STEWART: Looking at it in another way, for an increase in the labour force of 7,000 you have an expenditure of \$87 million, which is about \$12,000 per additional worker. That seems to me a very high capital expenditure merely to bring land into production.

MR. BENNETT: It not only brings the

land into production; it brings that added wealth, that very concentrated wealth.

MR. BONNER: In secondary industry we think nothing of spending \$150,000 per employed person.

MR. STEWART: I know, but that is not quite comparable, is it?

MR. BONNER: It is one of our basic industries. If we do not produce, our other industry has nothing to eat.

MR. STEWART: It may be that my view of this is affected by the fact that the type of agriculture with which I am familiar is different to this.

MR. BENNETT: I do not think you can compare an acre of wheat with an acre of apples. Many of the products produced in British Columbia are not comparable at all with grain growing.

MR. STEWART: . It does seem to me that when you add to that figure the roads and the schools and the other expenditures which are necessary to go along with such a development, you get into an extraordinarily high level of public development to produce a relatively limited production.

MR. BENNETT: The expansion in dollars will compare with the expansion in dollars elsewhere.

MR. STEWART: What is the value of production per worker in agriculture? If you

apply that to your 7,000, can you get the increase, the additional wealth produced?

MR. BENNETT: We will supply you with that information.

MR. STEWART: It just does seem to me a large expenditure to get 7,000 more people on the land.

MR. BENNETT: I think you will find that in a 7 acre orchard, it will produce in dollar value perhaps a thousand dollars an acre.

THE CHAIRMAN: Just on that one question of apple orchards, representations were made to us in Nova Scotia that the people in the apple industry there were destroying their trees and putting their apple orchards back into ordinary agriculture, with tremendous drops in land values and so on.

Granted that you have been ingenious in selling your apples in Great Britain through the various methods that have been indicated, I suppose it could be that the Nova Scotia apple growers might also be successful one of these days; and what I am wondering is whether in total we might end up with more apples. In fact we seem to have more apples now.

MR. BENNETT: That is quite true; but there are apples and apples. As a government we do not want to take all the credit for selling these apples in Great Britain. Our industry is

greatly specialized and the growers themselves are entitled to by far the greatest share of the credit for the way they handle their apples on the tree, how they take care of the trees, how they pick and pack their apples and store them. It is the growers who have worked for many years; and many years they have been far from prosperous, but they have kept up their programme and certainly should be encouraged.

THE CHAIRMAN: Further down on page 15, in indicating the potential or anticipated increase in the fishing industry, you point out that there is a possibility of increasing the salmon catch, for example, by 100 per cent.

There again may I ask if it is expected that there will be markets for that increased production?

MR. BONNER: With the growth of world population I cannot see any reasonable conclusion other than increasing dependence upon world fisheries. Generally speaking, fisheries are today one of the prime sources of proteins, and I draw your attention once again to what in some respects would be an alarming increase in world population.

In the last analysis, however, people will be fed, and arrangements will have to be made to feed them. I think it is sometimes a disadvantage to look at existing trade arrangements, particularly the presently

existing barriers to trade as between North America, say, and the subcontinent of India. Those are barriers of artificiality, if you will, which have been very ingeniously contrived but in the long run do not serve the people; and I would be very surprised if the governments of the world would not at one point be able to arrange their international trading to the point where the very substantial surpluses of North America might be disposed of properly to people who, by and large, today are very hungry.

My attention has been drawn to the fact, further, that in respect of our fisheries here there is no surplus problem. Our catch has been marketed each year for quite a number of years.

MR. GUSHUE: Has there been any decline in your herring production in recent years?

MR. BONNER: No.

MR. GUSHUE: How has it usually been processed? I think the markets for dry and salted herring in the east have declined, have they not?

MR. BONNER: Meal and oil.

MR. GUSHUE: You get the lowest return from that, do you not?

MR. BONNER: But good sales.

MR. GUSHUE: But compared with fish being exported or sold for food purposes you do get

a lower return for meal and oil?

MR. BONNER: The premium fish in our fisheries, of course, is salmon.

MR. GUSHUE: And you market that mainly in the canned form?

MR. BONNER: Yes, substantially.

THE CHAIRMAN: Mr. Bonner, on page 16 you outline the very tremendous expansion which is anticipated under the general heading of energy, and indicate that by 1975 water power will produce 73.8 per cent of the total expanded requirements as against 44 per cent today. Certainly that is a very enviable position to be in, and would seem to indicate that Mr. Grauer and some others will be reasonably busy for the next 20 years.

MR. BENNETT: They have been very busy in the last few years.

THE CHAIRMAN: I did not want to expand on that particularly, except to ask you what you think is going to happen to the coal industry. We have heard a lot about the coal industry in Nova Scotia and again in Alberta, and we would like to know what your views are about your own coal industry in this province.

MR. BONNER: In respect of coal, I think the requirements of coking are apt to be the largest phase of future demand. That certainly is anticipated in the experience in the Fernie region at the moment.

Turning back to your earlier question as to the possibility of establishing a basic iron industry in British Columbia, there would an additional demand placed upon coal as we have it in the province, with the occurrence of that industry.

In the Peace river, where natural gas is in such quantities, there is as well a very fine showing of good quality coal. My recollection is that there is a reserve of about a billion short tone of good quality hard coal in the region, known at the present moment. It is a semi-anthracite coal.

When one of our delegations visited the Orient two years ago there was some interest expressed by the Japanese industry in the possibility of having access to that basis of energy, because as you know Japan is virtually without reliable sources of energy at the present time. I am instructed that 2 billion metric tons of coal is the present known reserve in the Peace river.

I am sorry; I do not not want to trespass, but I think also that these projections do not take any account of reliance that may be placed upon coal as a source for a number of things in modern plastics and chemistry, with which coal is not ordinarily associated. I think perhaps the future of coal will not be in the form in which it is shovelled into furnaces,

but rather as the basis for dyes and other materials that may be concocted from its chemistry.

THE CHAIRMAN: On that subject, do you expect the development of petrochemical industries in this province associated with your gas industry?

MR. BONNER: The fact is that that natural gas has to be treated before it is offered for sale as an ordinary fuel, and our studies indicate that there are to be available tremendous quantities of material which, if not utilized, would become waste.

I would very surprised if the waste occurs in the development of the Peace river region. That development, of course, can take place in the form of the establishment of petrochemical industries in that region or, alternatively, with the rail connection which is shortly to be established to that region by the northerly expansion of the P.G.E. it can conceivably be that many of these liquid by-products may be conveyed to other parts of the province or perhaps to the lower mainland, where a petrochemical industry could be formed.

THE CHAIRMAN: Under the heading of trade, on page 22, you refer to the problems which you say may be expressed under four headings. I think the first three are reasonably clear, but I am not entirely clear about the fourth one, which

says:

"The need to maintain foreign purchasing power on a dollar currency basis, notwithstanding the marketing of our products to other than dollar countries."

MR. BONNER: I am referring to the present restrictions on international trade involved in being a member of a dollar trading region. It stands to reason that sooner or later the sterling area, which is a very considerable portion of the world, both from a trade point of view and a population point of view, must be brought into the dollar community, and the sooner we get there, the better. That is the point to which we are addressing ourselves.

I should point out as well that these present restrictions on Canadian trade, confining it to the dollar area, effectively exclude us from commonwealth trade, which of course is another subject matter entirely. If our ingenuity is such that we cannot trade within the commonwealth, our outlook for international trade would be gloomy indeed.

THE CHAIRMAN: That brings me to page 23, where you say:

"The reconsideration of national and international trade

policies is therefore urged better to meet the nature of British Columbia's economy. Matters for consideration should include:

- (1) A freight rate structure that will facilitate the marketing of British Columbia products in Canadian markets.
- (2) The expansion of international trade facilities and ready convertibility of currency exchange."

The last point was the one I particularly had in mind, but on all of them I think it would be helpful to us if you have particular views as to what should be done under those two headings if you would give us the benefit of hearing them.

MR. BONNER: On the first point, on the freight rate structure, perhaps I should file for the record of this commission the numerous briefs which British Columbia has from time to time placed before the board of transport commissions on this subject.

In this connection a considerable improvement in our freight rate structure was achieved with the decision effecting equalization of rates in Canada, and that has gone some distance in realizing a solution to what we feel

to be a very real problem here at the end of steel, that of having access to the important markets of central Canada by rail.

I think in these briefs which I will undertake to file you will find an opportunity at your leisure to see the points which are developed in a very complicated field, to which I should not address myself at any length this morning.

On the matter of the expansion of international trade facilities, I have made some general remarks; but to be specific, I think we have to reach the point -- and that soon -- of accepting sterling; and that is a specific suggestion.

THE CHAIRMAN: Well, I will ask you two specific questions. What do we do with it when we get it?

That presumably means that we would accept payment for Canadian exports either in sterling or in credit; and the question I would like to ask is whether you think there is any prospect that the British authorities would agree to any proposal along those lines.

MR. BENNETT: It would be the same proposal that Great Britain used when she was the world banker. In other words we would accept sterling, use what we need to buy in the sterling area, and the balance we would invest back as capital investment somewhere in the

sterling bloc; not necessarily in Great Britain but in the other great areas that comprise the sterling area.

In other words we are pointing out that a country like Canada, which has grown up to the extent we have, if we are to become a creditor nation we must act as one.

MR. STEWART: I do not want to get into the whole field of education at all, but I am certainly interested to see that you project a univeristy enrollment of 26,000 in 1975, on page 7, and a capital expenditure on the university of \$60 million.

My question really is this. By "University of British Columbia" you mean the higher education. You do not necessarily mean there are going to be 26,000 people in that particular community, but you do project a considerable extension of higher education, whatever form it will take?

MR. BONNER: I think actually the form it will take will be an increasing reliance upon higher education devoted to technological training, and that would be consistent with our anticipated development of secondary industry here. But I point out that the figure of 26,000 to which you refer is not inconsistent with the United States experience.

MR. STEWART: I am not suggesting it is. I was particularly interested in your

reference to technological training.

MR. GRAUER: With respect to the references to the Yukon and Alaska respectively, I take it they are considerations which may or may not fall within the 25 year period? As far as I can see you have not taken them into account in your forecast?

MR. BONNER: I think whereas those are indicated as possibilities, they are not taken deliberately into account in this projection; but I think the movement of peoples in North America has to be imagined over the past 75 years especially.

We occupy a very unusual geographic position, in this way; that we are in effect a corridor linking continental United States with a very important territory to which the United States has title, and it is inconceivable that the United States shall depend indefinitely upon a sea or air connection to that very important outpost, which I suggest is important not merely from the standpoint of its own economy but more important to be regarded as significant in terms of hemispheric defence. And it is not likely to become less important in the immediate future.

THE CHAIRMAN: Well, thank you very much, Mr. Bennett and Mr. Bonner, for this very stimulating presentation. We are very grateful to you and for the information contained in the submission. If we may, we would like to feel that our research staff may be in touch

with your officials from time to time in the development of the more detailed statistics and so on.

MR. BONNER: Naturally on behalf of the government I would like you to feel free to call upon our technical staff for whatever additional information you may require. In the submission of the more fully documented brief, if your people would indicate the particular heads of interest in your eyes we shall pay particular attention to those subjects.

THE CHAIRMAN: Thank you very much.

MR. BENNETT: We consider your commission of first importance in our country. We know you are not going to conclude your labours with dispatch, and we also believe you will not be in a hurry to write your report. At a later date, should you wish the government of British Columbia to appear again before you, either here or in Ottawa, we will be glad to do just that, because after studying our further briefs and listening to others, you may want to cross question us again. We promise you 100 per cent cooperation, not only here this morning but at any time during the period your commission is sitting.

THE CHAIRMAN: Thank you very much. Now, gentlemen, I have just had a word with Mayor Harrison, and we have decided to adjourn

now until 1:45, when the city of Victoria will present its submission.

---At 12:30 p.m. the commission adjourned.

---At 1:45 p.m. the commission resumed.

THE CHAIRMAN: Well, gentlemen, shall we come to order? The next item of business is the presentation of the submission by the city of Victoria, which we will mark as Exhibit 74. Mayor Harrison, would you proceed to present it?

MR. HARRISON: Mr. Chairman and gentlemen of the commission, I would like first of all to draw to your attention that the documents submitted to you this morning, or I should perhaps say this afternoon, has been rather hurriedly put together, owing to the lack of sufficient time to get it as correct as I would like to have it.

In going through this memorandum submitted to you, you will perhaps find many small items omitted, and some perhaps slightly inaccurate. We have not had time, really, to go over the briefs and examine them. However, I will speak to you here, and will correct anything I see wrong as I progress; and if I may I will send to you, if you so request, complete details on any item I mention, whatever it may be.

The briefs submitted to you this afternoon are in two parts, not because they would be too bulky if put together, but because it was put together at two different times in

order to make haste.

Mr. Chairman and gentlemen of the commission, I first say thank you for your kind invitation of September 19, 1955, in which you asked me to appear and express my personal views upon the matters which are the subject of your inquiry. The municipal council have also authorized me to appear before you and deal with all matters, things and views which may in any way affect the city of Victoria.

The ground to be covered by your royal commission is very extensive and important; in fact I believe it is the first time in our history that such a comprehensive attempt has been made, one may say, to take stock of ourselves and govern our course of action in the future.

In order to arrive at proper conclusions it is manifest that all angles that may have any bearing must be covered and analysed. One must of necessity, in order to cover and understand our position, go into our geographical position as well as the reason for our founding and maintenance as a part of Canada.

One must never forget that prosperous cities often become abandoned. We now call them ghost cities and there are many, particularly in the United States. Ghost cities are simply those that came into being because of some strategic reason, in railroading

or for military or naval purpose, or perhaps more often because of a find of gold or other precious metal or some other important natural resource being discovered and an industry established.

When the reason for such a location becomes no longer important, because of the failure of the discovery or the exhaustion of a natural resource, such cities collapse and become deserted, resulting in the loss of millions of dollars, an economic disaster to any nation. We all know that nations, including our own, founded and maintained locations of importance for purposes of military or naval strategy or trade. Thus many places and cities throughout our empire became and some still remain outposts of the empire, and as a matter of fact it does keep up our prestige amongst nations.

Coming to the city of Victoria, many circumstances and reasons perhaps unique in history caused our city to be founded and built. It is most important to keep in mind our history in this regard and to see why we should be maintained, even though we may not be revenue-producing to Canada, and why the city's future cannot be counted upon to any great extent in that regard.

I am not going into the explorations of the Spanish or the British, or into any of the very ancient claims. I am

simply dealing with the pertinent and actual facts that concern the question, from its practical standpoint in history.

After the wars of 1812 the boundary between the United States and Canada was settled by the treaty of Ghent on December 24, 1814. This treaty settled on the eastern boundaries but not west of the Lake of the Woods. The territory in dispute was called the Oregon territory. This consisted of all the territory lying west of the rocky mountains bounded on the south by parallel 42 north latitude -- the north boundary to California -- to parallel 54 - 40 north latitude, the south boundary of the Alaska panhandle, which of course included all the islands adjacent to the same.

To make what I say quite understandable I have furnished a couple of maps. We know, of course, the general idea, but it may be important to draw your attention to one or two facts. Looking at this first map, the northern boundary of California, which is 40 degrees north latitude, is shown by this line of x's. The northern boundary of what they called the Oregon territory was here, at latitude 54 - 40; and I am sure you have heard the expression, "Fifty-four forty or fight."

That was American territory. This little mark here outlined with noughts was a bit of the territory very much in dispute. The 49th

parallel, which we have now, goes to the centre of the strait of Georgia, across Vancouver island and thence follows the main channel to the sea. I make a note here that the United States based its claim on a cession in 1824 by Russia of all her claim to territory south of 54 - 40, and that is where they got that expression to which I referred a moment ago. They claimed that by this Russian cession they were entitled to it all, and other claims were also made.

Britain claimed by discovery and quitclaim in 1819 by Spain of her title to this region north of the 42nd parallel, which is the northern boundary of California. The campaign of 1844 had reference to the claim of the United States in the northwest boundary dispute. This was at first their determined stand. I mentioned their cry, "Fifty-four forty or fight." That was the cry in the United States in 1844. It is most important to bear that in mind. We were to be shut right out of the Pacific ocean at the Pacific coast. That was the strong and powerful effort made by "Fifty-four forty or fight."

In 1843 Douglas had founded Victoria at parallel 48 - 25, so that was before the cry of "Fifty-four forty or fight." I then proceed in the brief to relate something about Douglas, in regard to who he was and so on, and then I continue to say that in 1830 he was transferred to Fort Vancouver in Oregon territory. When I

refer to Vancouver I am not referring to Vancouver, British Columbia; I am referring to the Vancouver which exists down on the Columbia river at this point, some distance from the sea. That was the location which Douglas assumed in the year 1830, in Oregon territory, that territory still being in dispute, of course. I mention then when Fort Vancouver was founded, which is not important except from a historical point of view.

Then there was a conference between the United States and Britain, and repeated negotiations. Britain offered the 49th parallel westerly as far as the Columbia river and thence to follow the stream to its mouth; that is to say, following that line southerly and westerly following the Columbia river. Neither country could agree, and the conference ended.

Eventually a compromise was offered. In August, 1827, it was agreed that there should be a joint occupation of all the lands in question of particular concern to the area, westerly of the junction of the Columbia river with the 49th parallel, thence down that stream to its mouth. I also point out, by way of a note, that Astoria, at the mouth of the Columbia river, was founded by a United States corporation known as the Astor company. I point out that during the war of 1812 the Astor company sold it to a British company, and the British changed the name

to Fort George; but in 1818, by reason of the wording of the treaty of Ghent, the Americans took over Fort George and renamed the location Fort Astoria.

I relate this to show the tension that continued between the two countries. In 1818, on October 20, the London convention took place regarding the boundary, but the boundary line was not settled and it was left undetermined for 10 years. During those 10 years continued negotiations were in progress, and all the conferences to settle the western boundary failed.

In 1824 a further conference took place. The United States offered the 49th parallel to the Pacific. I mention this particularly to you because the word "Pacific" has great bearing on the questions I am going to bring before you later. Britain offered the 49th parallel to the Columbia river, and then to follow that stream to its mouth. Repeated negotiations were again of no avail.

Eventually a compromise was offered. In August, 1827, the joint occupation of all the lands in question -- that is, the whole of Oregon territory and particularly the part with which we are dealing -- was renewed, but subject to either nation giving on year's notice.

Each of the nations then started to

build up their rights by general colonization, in order that the nation which had the largest settlement in the area should then be in the superior position to lay claim to it all. The United States had easily the best of this move. People from California, and those now crossing by thousands over the plains of the continent on their side of the boundary, made it possible for the United States to carry on its colonization. Great Britain was in a difficult and almost impossible position in endeavoring to equal the efforts of the United States, and did not make any serious effort to do so. It had no transcontinental road or railroad, and had only ships to which it could look.

Douglas, afterwards Sir James Douglas, governor of Vancouver island, who was at Fort Vancouver on the Columbia river, some miles from the sea and of course in Oregon territory, saw what was inevitable and of course saw the dangerous tension which might mean war. He knew that this territory would fall into the hands of the United States, since their colonization far outnumbered ours. So on March 1, 1843, Mr. Douglas with some 15 men quietly left Fort Vancouver, marched overland to a point near the mouth of the Nesqually river at the head of Puget sound, a distance of about 150 miles, where he and his men took the steamer "Beaver" and set sail for what is

now Victoria. He arrived on March 14, 1843. Here he built a fort which he called Fort Victoria later on.

Then I relate a few words about the ship "Beaver"; how it was built and so on. It was a very substantial ship. She came around the Horn under sail, and when she reached the coast of the United States they put engines in her at Fort Vancouver on the Columbia river. She became then a ship of considerable power, driven by steam, something which they did not possess.

Then I go on to describe Fort Victoria, and this is important. It was a large fort, over 100 yards in each direction, well built; and I tell you how it was built, so that it was the largest and most powerful fort on the Pacific coast. Douglas came to this point on the island which he knew was going to be in serious difficulty, and at the risk of war built a fort of great power for those days. It had two bastions, with six cannon in each bastion, and he had the armed steamship "Beaver". These made a powerful combination.

The boundary line, which was not yet agreed upon or defined, was again the subject of much discussion, one of the chief points being a free port if Britain were to keep all of Vancouver island. That again is a most important point, the free port, with which I shall deal

later on, to show you that we had it, and it was taken away from us. This may be easily inferred by reading a letter in the British Columbia archives written by Gilbert Malcolm Sproat, who was agent general to the imperial government for the colony of Vancouver island.

Then I deal with the use of the slogan "Fifty-four forty or fight" in the United States, after, as I say, Douglas had come here at the risk of war and built a great and powerful fort. That fort was not built because of the Indians; the Saanich Indians and other tribes were very friendly.

The discussions above referred to may also be directly understood from the letter by the British minister Pakenham to the foreign secretary, Lord Aberdeen, from which I quote:

"On the 26th August, 1844,
I laid before Mr. Colhoun (secretary
of state) the proposal authorized
by your lordship's instruction
relating to a free port either on
the mainland or on Vancouver
island south of the 49th degree
of north latitude --"

That is a point you are going to hear something about in a minute. On September 12, 1844, the same minister again offered Mr. Colhoun this term:

"In addition, Great Britain offers a separate territory on the Pacific, possessing an excellent harbour, with a further understanding that any port, or ports, whether on Vancouver island or on the continent, south of the 49th parallel, to which the United States might desire to have access, shall be a 'free port'".

On July 12, 1845, the United States secretary of state, Mr. Buchanan, wrote the following to Minister Pakenham:

"I am authorized by the President to propose to the government of Great Britain that the Oregon territory shall be divided between the two governments by the 49th parallel of north latitude from the Rocky mountains to the Pacific ocean, offering at the same time to make free to Great Britain any port or ports on Vancouver island south of this parallel, which the British government might desire."

This is a very important question again. The south end of Vancouver island would have been United States territory. Up to this point in history, no arrangement had been concluded whereby Great Britain was to have all of Vancouver island. If this communication had been adopted, the 49th parallel would have cut across the straits of Georgia and across Vancouver island from that point on Vancouver island which is known as Ladysmith on the east to just north of Ucleuelet on the west.

I am taking the liberty of showing you just where that is, because it is hard to visualize without knowing local history. If I may, I will leave these charts and maps with you. The 49th parallel, if it had been carried toward the west, would have gone straight across Vancouver island from Ladysmith to a little north of Ucleuelet, which was an important point which will be dealt with later on by Lord Carnarvon. It would come just at about the middle of what we now know as Long Beach.

That would have meant that all territory, including the straits and south would have been in United States territory. In other words even if we had the 49th parallel, we still would not have had an outlet for the west.

In 1846 the United States, chiefly through the Democratic party, raised the cry and

slogan of "54 - 40 or fight." This slogan became famous all over America, and the situation was dark indeed. Finally on May 22, 1846, the President of the United States informed the British authorities that he intended to abrogate the terms of the convention of 1827, which was the agreement of joint occupation.

This caused further strained relations and in consequence further negotiations. In fact, from 1827 on America was continually building up its occupation of the Oregon territory. Propaganda that Britain was an aggressor and was trying to keep the Oregon territory was spread far and wide.

In 1832 Nathaniel J. Wyeth led a party of Americans to Oregon; as a matter of fact he came to the Fort. Mission stations were started. Senator Linn in 1838 was chairman of the select committee on Oregon, and he introduced a bill for the occupation which failed, and again introduced a similar bill in 1841. In 1840 Greenbow published a "History of Oregon" and its settlement by the United States.

Things got worse and worse and continued to get worse in the years following. The conference of August 23, 1844, found America now insisting on the 49th parallel to the ocean; and again in March and in July, 1845, it was to be to the Pacific ocean.

This went on until a feeling finally grew up that there must be an avoidance of conflict, and so there was to be a deflection of the 49th parallel to the gulf of Georgia "to avoid cutting off the lower end of Vancouver island, upon which stood Fort Victoria." That saved the day. The British demands then got more and more specific. Their line was to be parallel 49 --

-- from the Rocky mountains to the seacoast and thence in a southerly direction through the centre of King George's sound and the straits of Juan de Fuca to the Pacific ocean, leaving the whole of Vancouver island with its ports and harbours in the possession of Great Britain."

This was then agreed to and the treaty was signed on June 15, 1846.

I draw to your particular attention the final outcome, which clearly shows the strategy and foresight of Douglas in building at Victoria on Vancouver island south of parallel 49 the largest fort on the Pacific coast, with his well armed steamship.

Things then happened quickly, and a treaty was finally arrived at whereby the border line was settled. On June 15, 1846, a

boundary line treaty was agreed upon and signed. It was to be the 49th parallel to the gulf of Georgia, with Britain to keep all of Vancouver island, "thence deflecting southerly through the centre of the channel to the ocean."

The centre of the channel was not defined. Again an indefinite position was created. What was the centre of the channel, and how was it to be defined? This is a vitally important question, gentlemen.

Owing to this treaty, and while the centre of the channel to the ocean was still undefined, the question of a free port at once came into being. On January 13, 1849, the Hudson's Bay Company applied for a lease of the whole of Vancouver island. You will notice that up to this time Great Britain had not declared any part of Oregon territory the territory of Britain, certainly not Vancouver island, until they defined the centre of the channel. Then it was different. Britain acted, and granted the Hudson's Bay Company a lease for a trifling rental. Douglas was governor of the Hudson's Bay Company at this time. By now he was well esconced in Victoria on that part of the island south of parallel 49 with his large fort and well-armed steamship. His lease terminated April 3, 1867. Britain followed this wise, strategic move by almost immediately, on March

11, 1850, declaring Vancouver island a crown colony.

Let us follow that for a moment, to see how important this question is. Douglas came across at the risk of war. He was still factor of the Hudson's Bay Company. The United States and Britain then agreed that there should be a centre line down to the ocean. He asked for a lease, and he got it; so then he had a fort and he had a lease from the crown. Then the crown declared it a crown colony. The boundary line through the gulf of Georgia and the straits of Juan de Fuca, however, was still unsettled. San Francisco had been taken possession of by the United States, and was incorporated in 1850.

Then Blanchard was appointed by the crown as the first governor of Vancouver island, and he arrived at Victoria on March 18, 1850. He resigned on November 18, 1850, leaving Douglas as chief factor of the Hudson's Bay Company, holding a lease from the crown to the Hudson's Bay Company of the whole island in command. I give this as a matter of continuity of history, so the whole story will be before you.

Then James Douglas took the next step. He declared Victoria and Esquimalt on Vancouver island to be free ports. This was on December 3, 1858. That is important, because at that time Douglas was still factor of the

Hudson's Bay Company; he was not governor of the crown colony, but he took this step.

There were then two crown colonies.

First was Vancouver island, which was declared a crown colony on March 11, 1850. At that date the whole island was under lease to the Hudson's Bay Company, and it was declared a free port by declaration of Douglas on December 3, 1858. Then British Columbia was declared a crown colony on August 2, 1858. Faith was kept on all points as far as Britain was concerned. At that time, and since September, 1851, Douglas had been governor of Vancouver island. After proclaiming both Victoria and Esquimalt free ports on December 2, 1858, he then dissociated himself with the Hudson's Bay Company, because they may have said, "You have done something you should not have done, because you are simply governor of the Hudson's Bay Company and had no right from the crown." So he severed his connection and became governor of British Columbia. He then again declared Victoria and Esquimalt free ports by proclamation of January 18, 1860. That was about 2 years after British Columbia had been declared a crown colony.

He made two declarations. When the crown took possession and put him in power, he reiterated the first declaration for a very good reason. Now we come to a rather important part in our history, which has a great bearing on our present situation.

As was to be expected by reason of the geographical position, Vancouver island became a community of "deep depression, in fact bankruptcy." That is a sentence from history, and I am going to show why that happened. This part of our island was surrounded by the United States, and so faced bankruptcy because of its geographical position. That geographical position, incidentally, is the same now, of course. When in May, 1866, the Bank of British North America refused further advances, public officials and public accounts remained unpaid, and the credit of the colony was seriously impaired.

History tells many more facts concerning the serious plight of the colony. It had nothing in the way of industry or large natural resources, and it has not as yet. An agitation was started for union with British Columbia; but while negotiations were still on foot, union came suddenly and unexpectedly.

The relevant facts of that union are as follows; this is the crown colony of Vancouver island joining the crown colony of British Columbia. The bill for the union of Vancouver island and British Columbia was introduced in the imperial house. By clause 2 the bill provided:

" -- that after the adoption

by the legislative bodies of the two colonies of an address in the form of union, the governor should proclaim the act."

On the second reading of the bill, however, on July 27, which was on the orders of the day for June 18, 1866, in committee this clause 2 was struck out, without any hearing. The act as amended then was given its third reading on July 30 and received the royal assent on August 6, 1866. Governor Seymour was in England at that time, and was hostile to Vancouver island. This handling of the bill and its passage created much bitterness and criticism.

From the above history, put as briefly as the matter permits, it is clear that Victoria and that part of Vancouver island south of the 49th parallel was practically seized and kept by Douglas as a necessary step to keep open the straits of Juan de Fuca and the strait of Georgia. Where would the mainland be if the 49th parallel crossed Vancouver island as above referred to, so that these waters would be ceded to the United States?

Now as of right we held and still hold **this** land, and we have half the channel to the Pacific ocean as of right, instead of possibly

having a treaty as a matter of grace from the United States to permit us a way through to the Pacific ocean, which is far more likely. In other words if that 49th parallel had gone across Vancouver island, British Columbia would have been stymied and would not have been able to get through. That is, they would not have been able to get through as a matter of right, unless it was done under a treaty. That is clear; but when we owned the other half of the channel it became a matter of right.

We remember a case where something the same occurred. It was provided by the treaty settling the Oregon boundary of June, 1846, ratified on July 17, 1846, by article 1. After agreeing that the boundary line should continue to the middle of the channel, it went on to say:

" -- provided, however, that the navigation of the whole of the said channel and straits, south of the 49th parallel of north, remain free and open to both parties."

Is it open and free today, gentlemen? The answer is no, but that was in the treaty. Article II of the same treaty provided:

"From the point at which the 49th parallel of north latitude shall be found to intersect the

great northern branch of the Columbia river, the navigation of the said branch shall be free and open to the Hudson's Bay Company and to all British subjects trading with the same, to the point where the said branch meets the main stream of the Columbia, and thence down the said main stream to the ocean, with free access into and through the said river or rivers; it being understood that all the usual portages along the line thus described shall in like manner be free and open.

In navigating the said river or rivers, British subjects, with their goods and produce, shall be treated on the same footing as citizens of the United States, it being, however, always understood that nothing in this article shall be construed as preventing, or intended to prevent, the government of the United States from making any regulations respecting the navigation of the said river or rivers not inconsistent with the present treaty."

What became of these rights granted through United States territory? We have not got them. The river to which we are referring is the Columbia, of course, and by the wording of what I have read to you from history the Columbia river really crosses the boundary twice, as we know. It is called by a different name, but it is the same river; and when they say the two rivers they mean both rivers. I think it is called the Kootenay now, but then it was called the Columbia, and all that was to be free and open to us to the Pacific ocean. It is not today. I can illustrate to you gentlemen how sometimes if you do not do a thing as a matter of right, you may not do it at all; and if you do get it, it may be taken from you.

Then the colony of British Columbia joined Canada on May 16, 1871. Agitation commenced for the colony of British Columbia to join Canada. The country was poor; the early gold rush had died. This is an important part, to which we shall come in a minute. The people of Vancouver island, however, protested vigorously, even sending a petition in 1867 to the home authorities asking to be relieved from --

" -- her host of officials
and her burden of debt or be allowed
to cast in her lot with the United

States."

However, on January 29, 1868, a meeting was held in the interests of confederation, and a resolution was finally presented asking the admission of the colony of British Columbia into the Dominion of Canada, but "on fair and equitable terms." On March 25, 1868, a reply was received from Ottawa urging immediate action.

The whole matter was again fought over bitterly, one of the two arguments most used being that Canada might not fulfill the conditions after union had been consummated. We will see later how that became true, in part. In May, 1868, a confederation league was formed to support confederation, and arguments and bitterness still continued.

The following year, 1869, Sir John A. Macdonald wrote a letter to the governor general indicating his desire for union. He criticized Governor Seymour for causing delay. This letter said in part:

"It is quite clear that no time should be lost by Lord Granville in putting the screws on at Vancouver island, and the first thing to be done will be to recall Governor Seymour if his time is not yet out."

Governor Seymour died on June 10, 1869, before a reply had been received from Lord Granville. Anthony Musgrave was appointed to succeed Seymour. He reached Victoria on August 23, 1869.

Governor Musgrave made public a dispatch from the Secretary of State for the Colonies, dated August 14, 1869, which amongst other things asked whether British Columbia wished to stay aloof from the dominion. It pointed out that the imperial government was in favour of the union, and bluntly announced:

" -- as British Columbia was a crown colony, the home government felt bound to give for the consideration of the community and the guidance of Her Majesty's servants a more unreserved expression of their wishes and judgment than might be, elsewhere, fitting."

The governor in his address to the legislative council in February, 1870, read by the colonial secretary, told the house that "to trifle with the matter further would be discourteous," and then he outlined his idea of the terms.

Objection was taken to the way in which confederation was being forced upon the colony. A delegation was sent to Ottawa. For 10

days the terms were debated by this delegation at Ottawa. On July 7, 1870, a telegram was sent advising that terms had been agreed upon. The imperial government, on August 9, 1870, passed the British Columbia Act, 1870. The imperial house on January 5, 1871, had laid before it the final terms of union.

As related, the Vancouver island people in particular were strenuous objectors. They had been forcibly joined to British Columbia without any terms, and there was much dissatisfaction with the terms of this treaty. History also tells us that amongst many arguments was this; and this is a very important quotation. You will see how it applies in a moment.

" -- the access to the outside world was through San Francisco. Most of the business was done with that city, and the American ports on Puget sound."

Obviously, from looking at the map, that would be the case. In fact things went so far that on July 2, 1866, Mayor Banks introduced into the House of Representatives of the United States a bill for admission "for the territories of Selkirk, Saskatchewan and Columbia" -- that was British Columbia -- to the United States annexation, stating that it "had in British Columbia the support of two of the strongest

newspapers and some very prominent men, most conspicuous among them being Dr. J.S. Helmcken." He was one of the great pioneers of this island and of British Columbia. He married a daughter of Sir James Douglas, and his family has carried on down to this very day.

He was not disloyal; not at all. Do not get that impression for a moment. He wanted the crown colony re-established, because he saw that Canada might not and as a matter of fact did not carry out its terms.

Several pages of our history deal with these heated debates. The upshot of the matter was that British Columbia was joined to Canada, the union being finally consummated on July 20, 1871.

The important terms, as far as this matter is concerned, are Nos. 4 and 11. Term 4 reads:

"The dominion will provide an efficient mail service, fortnightly, by steam communication between Victoria and San Francisco, and twice a week between Victoria and Olympia; the vessels to be adapted for the conveyance of freight and passengers."

So we were to have a line to San Francisco and Olympia, which was then and still is

the capital of the state of Washington. Term 11
read:

"The government of the
dominion undertakes to secure the
commencement simultaneously within
two years from the date of the
union, of the construction of a
railway from the Pacific toward
the Rocky mountains and from such
point as may be selected east of
the Rocky mountains toward the
Pacific to connect the seaboard
of British Columbia with the
railway system of Canada; and
further, to secure the completion
of such railway within 10 years
from the date of union."

This follows certain provisions
regarding land, etcetra, which are unimportant
regarding the point I have in mind. It is to be
noted that as a matter of law, none of the terms
of union or the British North America acts, 1867
to 1930, can be repealed, amended or altered,
even by the consent of the province and the
dominion. It must still be done by the imperial
parliament. I refer you to the statute of
Westminster, 1931, and in particular to section
7, under which we cannot alter those terms. We
have not the power, never have had it. It has
to be done by Britain.

Canada failed to carry out these two terms of union. The following makes the matter clear as to the failure of Canada to comply with these two particular terms of union. The dominion government's disregard seems to have been first noticed in the year 1888, and was brought before the government in the report of a committee of the honourable the executive council, approved by his honour the lieutenant governor on the 14th day of January, 1888. That was on a memorandum from the minister of finance, dated January 13, 1888, reporting:

"That he is informed, and has every reason to believe, that the subsidy for the steamship mail service, as provided in the fourth clause of the terms of union, has been discontinued, and recommending that His Honour the Lieutenant Governor be requested to dispatch the following message by telegraph to the honourable the Secretary of State for Canada.

"The government of British Columbia protested against discontinuance of the subsidy to the steamship mail service between this province and San

Francisco. That service was intended as much for trade and commerce as for the carriage of mail matter. Canada, in the terms of union, undertook to maintain the service in perpetuity, and has no right to discontinue it without the concurrence of the province, as one of the high contracting parties."

The committee approved and the message was sent. This is the reply which was received by telegram from Hon. Thomas White, minister of the interior, dated Ottawa, January 14, 1888.

"Mails have for some months not gone by the ocean route, and the mail subsidy has been withdrawn with the consent of the company."

That was a company operating on the coast, and it was not an American company.

"The subsidy for the maintenance of the line for passengers and freight is the subject of communication. The government fully recognizes its obligations under the terms of union."

That was signed by Hon. Thomas White.

You could not get stronger language than that. Later it appears that the dominion did subsidize an American steamship company, the Alexander ships, running under the name of the Pacific Coast Steamships Company, with regard to mail. These ships also carried passengers and freight. But the dominion government never carried out, and does not now carry out, that part of clause 4 with regard to steamships from Victoria to Olympia, and to San Francisco for freight and passengers.

The non-compliance with the terms of union came up at an early date, mainly dealing with section 11. The premier of Canada, Alexander Mackenzie, said in regard to the terms in a confidential letter to J.D. Edgar, agent for the dominion government, under date of February 19, 1874:

"Mackenzie to Edgar (confidential)

Ottawa, February 19, 1874.

You will also put them in remembrance of the terms they themselves proposed, which terms were assented to by their local legislature, and point out that it was only the insane act of the administration here which gave such conditions of union to Columbia; that it could only have been because the administration sought additional

means of procuring extensive patronage immediately before the general election, and saw in coming contests, the means of carrying the elections, that the province obtained on paper terms which at that time were known to be impossible of fulfillment."

So clause 4, which was a solemn term, was and has been from the start broken. There are no steamships now. Canada has not provided any steamship lines between Victoria and San Francisco, and there never has been a steamship line between Victoria and Olympia, in Washington state. Victoria and Vancouver island need this steamship line very badly for our tourist trade, and we have lost untold and inestimable sums in the past, particularly when the Yukon trade was on, as well as right now. I will show you in a moment what we are losing.

Everyone knew what the "Pacific" meant by this time, as the very question had been the subject of bitter debate and negotiation when the question of the 49th parallel was at issue and finally settled, as hereinbefore related. So there is no doubt that everybody knew what the Pacific meant.

On June 10, 1873, the under secretary of state for Canada wrote the lieutenant

governor of British Columbia stating that the governor general in council had fixed Esquimalt on Vancouver island as the terminus of the Canadian Pacific railway, and that the Seymour Narrows be crossed. There is also an order in council approved by the governor general at Ottawa on June 7, 1873, definitely fixing the said terminus at Esquimalt.

I would like to make a note here, if I may, in regard to Seymour Narrows. You have probably heard a great deal in the east about it. I am showing you now the waters lying well north of Vancouver, British Columbia, and this approach to the northern part of British Columbia, toward the panhandle of Alaska, indicating the narrow passage between Vancouver island and British Columbia.

This chart will show you the situation in general. I am pointing to the strait of Georgia, which goes on down to Vancouver; then it goes to a passage through here until it strikes this point known as Seymour Narrows. Then it continues on up across the end of Vancouver island until it goes up to the far north of British Columbia.

Now, gentlemen, at this point I want to tell you something of that so you will see how important this was and still is. Seymour Narrows is shown on these two charts. You may have them, but I would like to present these to

you in any event. This is a closeup of Seymour Narrows. I am pointing to Ripple Rock, which we hear so much about and which the government is trying to remove. I understand the government is going to drive a tunnel from the island underneath Ripple Rock, which is in two pieces, one north and one south; one up here and one down here on the chart. Then it is proposed to go under those and up into them and fill them with high explosive and blow them out of the water, which would be a good thing.

At this point I might say this, that if you get that far with a tunnel you have only a very short distance to go to reach the shore of Vancouver island. I might add that Ripple Rock was never needed for the construction of a bridge, because there is a point at which the distance across is shorter than at that point. It is approximately 2,400 feet or a little more; call it 2,500 feet if you like. It is of a height on each side which would permit of a bridge being built high above the mast of any ship. All the inside travel of British Columbia goes up through there.

Of course they will blow the rock out; but while they are at it I do hope you will recommend to Ottawa that they continue that tunnel a further short distance and bring it to the shore of Vancouver island. It would not be very expensive if they did not go too far north,

as you will see by the contour at the bottom. So you will see how simple it would be, if they go that far, to build it a little farther and give us a connection which we have wanted ever since 1871.

I also show you this large picture. Don't forget, this is one of the finest power projects in British Columbia so far undeveloped. It is immense. It is capable of perhaps $1\frac{1}{2}$ million horsepower.

If you have any questions, gentlemen, as I go along I would be very pleased to answer them; but if you will leave them to the end perhaps I will get through more quickly. I can tell you the facts from what I have seen myself and from what I have learned.

I would refer you to an article entitled "Commencement of the Western Division of the Canadian Railway -- the first stake driven" which appeared in the Victoria Colonist, then called the Victoria Daily Standard, of July 18, 1873. It relates to the driving of the first stake. A flagstaff with flag and ceremony at Esquimalt, with dignatories and so on, are described.

Sir John Alexander Macdonald, prime minister, and his government started the whole matter. He wanted the union and its terms carried out. He went out of power, however, on November 5, 1873. Alexander Mackenzie and his

government were elected on November 7, 1873. It was during this regime that the terminus of the railway was disputed, chiefly on the ground of what the word "Pacific" meant. They had that very question before them when they settled the international boundary.

I refer you to Prime Minister Alexander Mackenzie's letter to James D. Edgar, who was sent out by the prime minister as a special commissioner, dated February 1, 1874. It reads in part as follows:

"My dear sir.

In your conversations with leading men in and out of government in Columbia, it will be well to let them understand that in proposing to take longer time than is provided in constructing the railway, we are actuated solely by an urgent necessity. That we are as anxious as possible to reach the object sought by all -- the early construction of the road.

We are, however, advised by our engineers that it is a physical impossibility to construct the road in that time -- that is, within the time provided in the terms of union -- and that any attempt to do so can

only result in very great useless expense and financial disorder. You can point out that the surveys for the Intercolonial railway were begun in 1864, and the work carried on uninterruptedly ever since, and although the utmost expedition was used, it will require still 18 months to complete it. If it

requires so much time in a settled country to build 500 miles of railway, with facilities everywhere for procuring supplies, one may conceive the time and labour required to construct a line five times the length through a country all but totally unsettled.

You will point out that it is because we desire to act in good faith towards Columbia that we at once avow our inability to carry out the exact condition of the terms of union. That it would have been an easy matter for us to have said nothing about it, or carelessly to have assumed the task of finishing the road before the month of July, 1881. Acting from a desire to deal frankly and honestly with Columbia, we considered what we could

do to afford, at the earliest possible date, some means of travel across the continent, preliminary to and in advance of a complete line of railway."

In other words, he said, "I am going to make shift as best I can to get across until we can finish it, whenever that may happen." He was right.

"You will point out that, as part of the dominion, it is as much in their interest as in ours to pursue a careful, judicious policy, also, that in assuming a disposition in spite of all reason to insist on impossibilities, they are only setting at defiance all the rest of the dominion and the laws of nature.

That by insisting on the 'pound of flesh' they will only stimulate a feeling on the part of the people generally to avoid in the future giving anything but the 'pound of flesh'.

You will remember that the dominion is bound to reach the seaboard of the Pacific only, not Victoria or Esquimalt, and you will cause an intimation to them that any further extension beyond the

headwaters of Bute Inlet --"

The road originally was to be a Canadian road, not a private corporation; and the terminus was not to be where it is now but at the head of Bute Inlet. There is Bute Inlet on the map, with all that great power, and they must have known it led directly up to Seymour Narrows.

" -- or whatever other portion of the seaboard may be reached, may depend entirely on the spirit shown by themselves in assenting to a reasonable extension of time or a modification of the terms originally to.

You will also put them in remembrance of the terms that they themselves proposed which terms were assented to by their local legislature, and point out that it was only the insane act of the administration here which gave such conditions of the union to Columbia; that it could only have been because that administration sought additional means of procuring extensive patronage immediately before the general election, and saw in coming contests the means of carrying the elections, that the province obtained on paper terms

which at the time were known to be impossible of fulfillment."

I have copies of further and other correspondence, all of which shows a desire not to complete the railway as above referred to at the time. I will have them copied and sent to you if you wish, including a petition to Queen Victoria by British Columbia to set aside the act of union of British Columbia and Canada and restore its position as a crown colony. Also the findings and terms of the "Carnarvon Terms" which the dominion government refused to comply with, after first agreeing to be bound by the findings. On May 23, 1878, the dominion government passed an order in council purporting to cancel the order in council of June 7, 1873. On October 16, 1878, Mackenzie and his government went out of power -- the cancelled order in council making Esquimalt the terminus went out of power also -- and on October 17, 1878, Sir John Alexander Macdonald and his party came back into power. The order in council of June 7, 1873, was then revived. This order in council revived the one of 1873 which made Esquimalt still the terminus of the railroads, and this is still so. As a matter of law it is still there. The order in council says so, and nobody has ever taken that order in council and destroyed it. It is still on the books.

This term II of the terms of union

was never properly fulfilled. The above short history tells us clearly how Canada did not keep its treaty and promise to this island, and this island suffered another loss in consequence but not of her own making. United States ships ply to and from Port Angeles, Washington and Victoria. For over 40 years a United States steamship has been serving Victoria for freight and passengers, and at times mail. This is coming down to recent times; not a ship financed by the government of Canada, but a United States company served us for 40 years. In the last year or so the C.P.R. also started to serve on the same routes from Victoria to Port Angeles, which is the closest port on the United States side to Victoria. However, the United States steamship company called the Black Ball Line left this run early this year and put their ship on the route between Departure Bay, Vancouver Island, and Horseshoe Bay, British Columbia. That is, the United States company withdrew that service. It was under no obligation to continue it, and I suppose it did not make enough money. It withdrew from that service and went up to Horseshoe Bay on the mainland, and from there to Departure Bay.

Victoria had to go to the United States and plead with the state of Washington to put on a ship from Port Angeles to Victoria. Engagements had been entered into by tourists

in the United States and tourist agencies for the crossing and accommodation, and we were without a ship able to handle the traffic, as the C.P.R. did not have ships with sufficient automobile space to look after the traffic. The Washington State Ferries were kind enough to adapt the only ship that they could make available, the Kalakala, but at a cost to them of about \$100,000. They had to change her so she could make a side landing. Thus for the main summer months and until September 30 they looked after our traffic. On that date both steamship lines withdrew, the C.P.R. refusing to keep a ship on after the profitable part of the main tourist season was more or less over, and the Kalakala because it could not take the fall and winter run owing to the rough storms to be expected at that time of year.

In other words, while the profitable run of tourists was on naturally, being a private company, they would make the best of it, but that was all. Then we found that the Kalakala, supplied by the Americans, as we knew all along had to come off the run because it could not stand the winter weather. It is a bit rough over there and the Kalakala was built for travel in the sound, where you get no storms whatever, where you can travel as you like. You could not run that ship in the winter on that service. She had to come off. So we have not a ship at

all. The Americans have not let us down; we are without a ship, that is all.

Now I am going to tell you gentlemen something of the loss we have sustained, and this is very pertinent. As you must know, Victoria has no main industry. The coal lies north of 49; the iron lies north of 49, and we have no major industry here. We never had, and I do not see how we ever can have unless what I am going to tell you very soon is brought into effect. Even our food comes across to us on that ferry. They send a freight ferry across every day or two with hundreds of tons to supply us. The United States does that.

Now I am going to deal with an industry we did have which was of great importance to us, which was one of the things that kept our feet on the ground at this point of the island south of 49. This was a large industry in which about 60 ships, especially built for the purpose of sealing in the north Pacific ocean and Behring sea, participated. A large sum of money was paid to Ottawa as compensation under the final sealing treaty which broke up the Victoria industry and forbade it carrying on its business. In addition Ottawa has received, and is still receiving, large annual amounts from the United States government for seals which the United States kills annually.

Victoria and British Columbia have also lost heavily in the salmon industry, from the protection and consequently the increase of seals due to the treaty. The industry employed a large number of men and was one of the main industries of Victoria for many years, until sealing was prohibited by treaty.

The treaty referred to was between Great Britain, the United States of America, Russia and Japan. In concluding the treaty, Great Britain asked Canada for her views with regard to compensation, and on March 29, 1909, the governor general of Canada telegraphed to the Secretary of State that the Canadian government was agreeable to the arrangement "on condition that sealers be given compensation by the United States."

In 1911 there were two treaties. Canada made a separate agreement with the United States to receive a share of the proceeds from the seals killed on land. The first treaty was in regard to the Pelagic sealing in the north Pacific, and the other was in regard to the sealing on the Pribiloff islands. I might tell you that seals are like salmon; they return to where they were born. They go back to the Pribiloffs, and they are Pribiloff seal, and the seals that belong to the other islands go there, and they are not interchangeable. The Canadian government instructed its delegates that

Canada had by separate treaty agreed to the cessation of ocean sealing on the principle of pecuniary compensation, that Canada's share in the United States partnership in regard to seals was estimated at over \$7 million.

The fact is that the United States government paid compensation to Canada, and this compensation, with the exception of a small sum for special reasons, was never paid to the sealers at Victoria and it has been held for technical reasons that the Victoria sealers -- the Victoria Sealing Company Limited -- is not entitled to any of the money, and the money has remained with the dominion government. Incidentally, the Japanese sealers, who were given government aid in building their ships, were compensated by their government in full. As far as the Victoria sealers were concerned, Canada kept the money and has kept the periodic payments made ever since. The salmon fisheries, in consequence of seal protection, are now losing heavily.

I would point out to you what happened with regard to the Halifax fisheries commission. Of the moneys paid in regard to the Halifax fisheries commission of 1877, \$5,500,000 was awarded to Canada and Newfoundland. Of this, \$4,500,000 went to Canada. It was decided in 1882 by act of parliament to pay the interest in annual bounties to those engaged in Canadian fisheries. The amount finally fixed of \$160,000

per year was to be distributed as follows: \$3 per ton on fishing vessels; \$3 per man to boat, and \$1 per boat to owner. These moneys were paid to the provinces affected only, namely the maritime provinces. So all the money the dominion got from the fisheries award of 1877 was paid to the maritime provinces, but that was not done with the money they got in regard to the seals. That is true, though you can hardly believe it.

All kinds of legal difficulties and arguments have been put in the way of Victoria, but the plain, cold fact is that Victoria and British Columbia lost an industry of tremendous value and received nothing in its place. Canada has been receiving annually large sums from the seals killed by the United States, and will be in the future. The seal herd is now said to be between 3 and 4 million, having increased from 300,000 to 400,000 because of this protection. The salmon fishing is a large industry in British Columbia, and it is said by those who should know that the fur seal is a tremendous eater of salmon. Under the principle laid down in the maritime provinces under the Halifax fisheries commission, British Columbia, and in particular Victoria are entitled to many millions of dollars.

I have most of the correspondence and copies that are relative to this matter; the long and short of it, however, are as follows.

Sealing was forbidden.

1. The Victoria Sealing Company, a Victoria company, never received any of the money paid to Canada by the United States as compensation for the Victoria sealers. Ottawa kept the money.

2. Victoria receives none of the moneys paid annually to Canada under treaty.

3. Salmon are becoming less and less numerous from the vast inroads made by the fur seals, which increased from a small herd of about 375,000 in 1911 to about 3 to 5 million strong now.

Canada got 15 per cent of the money under that treaty, and after the war with Japan her share was increased to 20 per cent. I can tell you now that I have taken this question up with Ottawa, and I see that at this very time, in Washington, D.C., according to a publication of the government coming from the department of fisheries, a conference is taking place right now to renegotiate a convention for the management of the Pribiloff seals in the north Pacific. The countries participating are Canada, the United States, Japan and Russia. I am sorry there is no one from British Columbia on that delegation from Canada, the personnel of which are to be announced later.

I give you now one or two references to show the unfairness and destructive

effect on industry here. A royal commission found, inter alia --

"(6) that if the Canadian sealers had never entered into the business or had been driven out of it, Canada would not have any claim under this last treaty."

That is a reference to the Pelagic sealing treaty of 1911. Also:

"Canada has got for nothing her share in a valuable partnership with the United States in the business of killing seals on land for profit."

Commissioner Audette, who was a federal judge, also said:

"It was the Victoria sealers who made it possible for the Canadian government to have any say in the matter....the government getting some money out of that business on their account which the government would not have gotten in any other way.....the sealers ought to be compensated for any loss they were put to."

Yet Canada kept all the money, giving

none of it to Victoria or British Columbia. This industry and the fishing industry could and would have been a great help in our geographically isolated position, which you can see by a glance at the map. As to the loss of our great commercial and sporting fish, the salmon -- the latter keeping up the tourist trade, as well as commerce -- I quote an extract from an article written by Max E. Lohbrunner. Mr. Lohbrunner is one of the last active sealers, who has been on sealing ships in the north Pacific all his life. He is a man thoroughly versed in the sealing business. He is a careful student of all that pertains to the north Pacific and Behring sea. One may rely on this active and alert follower of the sea, a man with unusual observation and possessing exceptional intelligence.

"The combined knowledge of the Victoria sealing fleet since 1869, with a fleet of close to a hundred schooners and crews for a good many years to study the migration, habits and diet of fur seal stomachs, I would estimate these seals eat 5 to 10 pounds of fish a day, often kill a 30 to 50 pound salmon and eat 3 or 4 pounds at a time. The rest is wasted. After a short sleep they

start fishing again, the same thing may be repeated.

Fur seal is more active and feed more at night than in the day. This has been proven. Any sealer will tell you there is more food in a seal's stomach a short time after daylight than the rest of the day. The reason, he sleeps more during the day. The same applies to hair seal and sea lion. During the salmon season, seals prefer salmon to any other fish.

We here on the coast of British Columbia have a certain amount of salmon 12 months of the year. Then assuming there are only 4 million fur seals, each destroying 15 pounds of fish a day; 4 million times 15 equals 60 million pounds or 30 thousand tons a day. 30 thousand tons times 365 equals 10,950,000 tons of fish per year."

That is true. If you have ever seen a seal come up with a salmon caught by the stomach and shake its head like that, and most of the salmon flies off with a piece left in the mouth of the seal. They are great killers of fish.

"The majority of these 4 million fur seal are on the coast

of British Columbia from November to the end of June, approximately 8 months, quite a number one year old are here the full year; therefore during their stay on the British Columbia coast these fur seal eat 7 million tons of our fish, and destroy a good deal more. Ask any troller or halibut fisherman who has been unfortunate enough to have fished among these seals how many large spring salmon and halibut they have had robbed from their lines by these fur seals in the waters off the British Columbia coast, especially Hecate strait."

In the year 1951 sealing operations on the Pribiloff islands produced 60,689 pelts. Canada's share under the provincial fur seal agreement was 20 per cent or 12,138 pelts, while the United States of America received 80 per cent or 48,551 pelts. Therefore in that one year alone the gross value to Canada, at \$100 or more per skin when sold to the public, equals \$1,213,800. The American share, 48,551 pelts at \$100 each equals \$4,855,100 for Uncle Sam. Then there is a reference to Japan, which you can read for yourselves.

I know about the salmon. I was born in this country, and I know the cost from a

national standpoint. In the year 1911 you could stand on Beacon Hill out over here, where you look at the Olympic mountains, and from about 50 feet off the rocks in every direction you could look, no matter where, as far as the eye could see there were hundreds of millions of salmon coming at once. You do not see one today; of course you do not. How could they keep it up.

They were attacked by these wolves of the sea and also the harbour seals, on which there is a slight bounty.

How do you suppose the fishermen are going to carry on? You see, these seals come down from the Behring sea every year and back again; that is their cycle. They have to eat, and they eat these fish. We had one of the greatest fishing banks perhaps of North America. What is it like now?

I am sorry I cannot dwell on this longer, but time does not permit. This is only the bare skeleton of it, of course.

Now, gentlemen, I submit that the above conclusively shows first, that Victoria and Vancouver island south of parallel 49 was a studied, courageous and patriotic act of James Douglas, not only to keep Vancouver island intact, but to save for Canada for all time the absolute right to use at least half of the gulf of Georgia and the straits of Juan de Fuca to the Pacific ocean, so keeping an outlet

to the coast of British Columbia instead of being bottled up forever.

Second, it shows that there being no major natural vast resource or other major financial reason for existence, Queen Victoria gave Vancouver island certain special privileges, Victoria in particular. All this was known to the queen, every bit of it; she gave her name to it. These special privileges included (a) a free port for Victoria and Esquimalt.

I stop here to tell you something. We were the oldest ships known. Any man who wanted to go sailing could come down to the office and say, "I would like to go next season," whereupon he would be signed on and told to draw whatever money he needed. It kept him going for the whole year. When they came back they had what you might call pots of money. They all got a percentage of the catch. The ship got some too, of course, but they did very well; there is no doubt about that. Everyone from the skipper to the cabin boy got a percentage of the catch. It was one of the most democratic things I have ever heard of in those early days, when people did not seem to have the same regard for other things which they have now.

It is to be noticed when you read the terms of the treaty, the terms of the union, that Queen Victoria said, "upon these terms you are joined." Well, it has been the reverse. We

are joined, but it has not been "upon these terms."

The other special privileges include (b) government ships to San Francisco and Victoria. We do not have them. (c) government ships to the state of Washington and Victoria; we never had them. (d) the terminus of the transcontinental railway to be Esquimalt, close to Victoria; we never had it.

In the third place, Victoria founded a special industry and it was a major one, the only one we had. That was the sealing industry. It was worth millions of dollars to Victoria. Where is that now? It is gone. Even written promises and terms made law, on the basis of which we joined Canada, were not carried out, and if we had known this in the first place there is no doubt that we would not have joined.

The final result is that Canada has gained through us an opening, as a legal right -- and there is a vast difference between this and a mere permission from a foreign state, no matter how friendly. We pay now more than we have ever paid in our lives for freight from the mainland -- from the mainland to the Pacific ocean, through a large strait, for which we get no credit from Canada except an arbitrary freight rate against us.

Canada has gained through the Victoria sealers (a) the amount of money paid by

the United States for the Victoria sealers, by keeping the same; (b) a partnership worth millions of dollars with the United States from the sale of seal skins that Canada got only through the Victoria sealers, as per the finding of Judge Audette. In those days, as you will understand, the fleet was not able to use power; they had to use sail entirely, and they were all based on Victoria harbour, with the exception of three, one at port Simpson and two at Ucleuet. It was a Victoria industry entirely, because they would sail up through here right above the present Johnston street bridge. They had an old swing bridge, and they would whistle and go right through. They would go generally around the month of February.

Victoria lost and is still losing:

(1) benefits of a free port; (2) trade and passenger service with San Francisco; (3) trade and passenger service with Washington. These caused us a severe loss in the Yukon trade of 1897, 1898 and 1899.

You will remember the days of the Yukon gold rush; I remember them well. I have been in the Yukon, and I know something about it. We lost that trade and Seattle got it all. It made Seattle. Seattle was so badly off at one time that the people did not have anything, and they decided they would have to build something to keep the people in bread and

butter. So they decided to build the great sewer down First Avenue. People laughed and said, "Oh, that is humbug." Then along came the Yukon trade and it has become one of the great United States cities.

Vancouver also lost by (4) having an arbitrary rate against us on freight from the mainland of British Columbia; (5) money compensation for the loss of sealing ships and the business therefrom; (6) the loss of yearly payments from the United States for seals killed, which we made possible; (7) loss of the salmon and the tourists and industries connected therewith.

On the other hand our chief asset in Victoria is our climate and beautiful natural surroundings which, with the parliament buildings, made a very fine asset. We have many retired and semi-retired persons here, I feel sure, because of our climate; but one can easily realize that increased taxation will cause a loss in this direction.

Finally, let me add that Victoria, even though losing so heavily by reason of the matters herein referred to, it being the capital and having the parliament buildings, will never drift into becoming a ghost city. I bring back to your mind what I told you in the first place as to what caused ghost cities to come about. If it had not been for the fact that

Victoria was the capital, I would hate to say how we would be situated right now. But there is no reason why we should be deprived of our rights or have our taxation raised in any way, if we receive proper and long overdue development of what we have and are entitled to. I shall be only too glad to appear before you at any time and place and amplify anything I have said today.

You will forgive me for speaking so plainly in my submission to you, but I believe the cold, unvarnished facts should be told you so you may form a full and fair opinion and come to conclusions and be able to give complete and proper advice to our national government.

I might add that I have had the pleasure of interviewing Right Hon. L.S. St. Laurent and have written to him several times regarding the Victoria sealers since January, 1952; and I now notice that the government of Canada has arranged a four-nation conference among Canada, the United States, Russia and Japan on the sealing question, to be held at Washington on November 28, 1955, to renegotiate in regard to the north Pacific fur seals.

In conclusion, it is perhaps clear to us by now that in spite of ups and downs most American people, and the United States as a nation, are very good and sincere friends of ours. There is no question of that. We have been preaching the doctrine that all people are

equal, that we must make no discrimination as between persons because of race, colour and creed; in fact there are laws to accomplish this.

That does not mean we will join other nations as a matter of caprice, and it does not mean that we should open the gates to a flood of persons from nations in Europe or elsewhere, even though some of them have been once our bitter enemies, for we here cannot be counted upon to look after them. I know we are bringing in many central Europeans and their families, and many are unable to find work. They come to me and tell me; that is how I know it. Many are not skilled or otherwise eligible to entitle them to join unions, thus getting liveable means. It must be the same everywhere, but here you cannot joining a union unless you have a certain certificate. They want proof of ability, and very properly so.

So what are we to do with this kind of new citizen? We have our own employable unemployed, particularly in winter. We have people who are willing to work and who cannot get work. How can we look after them without full dominion help? They should not be brought in and turned loose. We cannot have a new burden, not of our own making, because we have no control over the powers given the federal government by reason of the British North America act.

In other words, if you bring in

people who are unable to fit in with our unions, should that be our responsibility? The labour unions want to keep from labour strife, and these people must be competent or they are out. What can they do; and what can we do unless we have the power and ability to handle them? If we did have the power and ability, all right; we could handle them if we got what we were entitled to from the dominion; make no mistake about that.

If we here, south of 49, had large factories, or large natural resources, a large industry established by government help to absorb the influx it would be different; but we have not. Before any section of Canada should have immigrants pressed upon them, the emigrants should be advised by the importer and arrange for settled jobs to go to. Surely that is good sense. We cannot expect the skilful labour organizations to allow the unskilled to join and so lower their standing by the doing of inferior or incompetent work. To do otherwise, particularly out here where we have the disadvantage of freight rates against us, with our industries not large enough to absorb immigrants, we would be merely looking for trouble and dissatisfaction; and if such people were to become voters they might feel more inclined to vote in favour of our joining a richer country.

That concludes the brief. Now I

am going to make a few remarks. I shall be very short, referring to one or two important points. I will tell you, Mr. Chairman, of the things that have happened here, and why. The Canadian National railway -- at one time was called the Canadian Northern, or whatever it was called -- took over the charter of Victoria and Barkley Sound Railway. The Victoria and Barkley Sound Railway, if it had been built, was to go up the coast from Victoria by way of Jordan River and on up to Barkley Sound, then on up north.

That would have been a splendid thing for our development, but they did not do that. When they got a certain distance, after years of delay and the right of way got pretty well covered up, they turned and went up from Sooke Harbour; they turned and went through the Sooke lake country and joined up at Shawnigan, where there was another railroad. They cut out that entire line and went through a territory which is under reserve, and which you cannot enter because it is watershed property, and miles and miles were absolutely dead. They had to take off the passenger service, because it was not any good.

Now you will say, gentlemen, well have you not some nice outer docks there? I wish we had. Do you know about those docks? When the breakwater was built we had a fine ship calling

here. The advertising showed another branch out over here, and then they built two docks, two level docks, but they forgot that the tide came in.

Those docks cost millions of dollars. There it is; that is the breakwater, and there are the two level docks. They forgot the tide would come in; and when the tide comes in and the southwest wind comes up, the water goes right over the docks, so today they are not worth 10 cents to the public.

A complaint was sent to Ottawa, and they said, "Well, that is all right." Somebody said, "Why can you not raise them?", but they said that could not be done. So there they are today; and if you go down there with the southwest wind blowing at high tide, you have to put on your gum boots. This other wharf is out of commission; it has been taken over by a private company to build ships for Her Majesty.

The northern half of those docks had a grain elevator on it, but the operator found he could not use it. So he got leave somehow to build an addition to that dock. He filled it with thousands of tons of rock, and he runs railroad cars over it now. So that half is kept for junk, practically speaking; and that is the port of Victoria.

Then what else has Victoria had since those losses? I would like to know. You

may say the dredging of the harbour. Better not mention that, because I will tell you something about it. It is only dredged in a few places, where the C.P.R. goes.

We have spoken of the losses to Hon. Mr. Bonner. The mainland development has been enormous. There is only one industry of any real consequence on this island. The mills here that were established some years ago are still here, but there is no timber left to speak of. This is now called the Vancouver timber district, by the way, so you cannot find out whether the timber comes from Vancouver or Vancouver island. There is the cement industry, but do not forget that the larger part of that industry is not down here at all. It is up on a lake called Horn lake. The same company owns both operations, and could move the Victoria plant out there today and do a bigger and perhaps better job than by staying where it was established many years ago.

I have told you how our fisheries disappeared. You cannot go out and catch trout to any extent now; and speaking of trout, if you have the good fortune to go to a certain restaurant in Victoria, I had the pleasure of taking Mr. Claxton there a short time ago and offering him mountain trout at lunch. They came from Japan; they were not ours at all, but the fish that Japan raise came from British Columbia in the first

place.

Have we any water power? The answer is no, without giving you any more arguments. On that point, however, we have the British Columbia Electric Company bringing a cable across from the mainland. It is the finest thing they have ever done, and the public are mighty thankful for it. They can bring this over Seymour Narrows.

Then I would say a word about highways. Do you know that the trans-Canada highway does not come to Victoria at all? It does not; it by-passes us. They think that is a pretty good idea.

This, gentlemen, is a map of the city of Victoria. That part outlined in orange is Victoria proper. This part outlined in purple is the municipality of Esquimalt. This part outlined in green and yellow is the municipality of Oak Bay, and the rest is the municipality of Saanich. So you see we are confined in a small space.

You might ask why we do not all join. Well, hold on a bit. You have seen what happened in connection with the sewage business the other day, when they had to stop their work. I will not give you all the ins and outs of it, but it is not practicable at the moment, and I do not know what we are to do.

I am not going to deal with

anything further except the next brief, with which I will deal as soon as it is convenient to you gentlemen.

THE CHAIRMAN: I think, Mr. Harrison, we will have a recess now for 10 minutes and after that recess we will receive a very short brief from the corporation of the city of Nanaimo and the Nanaimo chamber of commerce. The representatives of both these organizations are anxious to get back to a council meeting tonight at 7 o'clock.

---Recess.

---After recess.

THE CHAIRMAN: Gentlemen, if you will come to order we will have a brief submitted by the city of Nanaimo and the Nanaimo chamber of commerce, which will be Exhibit 75.

MR. MUIR: Mr. Chairman and members of the royal commission, I wish to thank you on behalf of the city of Nanaimo and the chamber of commerce for this opportunity of appearing before you and presenting a short brief relating to the city of Nanaimo and the surrounding forestry and industrial area.

We have with us Mrs. G.L. Hall, an alderman; Mr. Russell Dudley, executive manager of the Nanaimo chamber of commerce, and Mr. Douglas Greer, manager of our industrial committee. I will ask him to present the brief.

MR. GREER: Mr. Chairman and members of the commission, I feel that being in this particular location, and you having had the benefit of hearing the brief of the government of the province of British Columbia, as well as that of His Worship the mayor of Victoria, it should be easier for you to fill in some of the gaps we have failed to cover in our brief. We have been under the disadvantage of having to get this brief together in a very limited time, so if there are any noticeable gaps I hope you will bear with us.

Greater Nanaimo is 76 miles north of Victoria, British Columbia, 38 miles west of Vancouver, British Columbia, situated most advantageously and centrally on the east coast of Vancouver island, well-known as the hub of Vancouver island, and recognized by leading manufacturers, financial institutions, and other businessmen as a distributing centre of unexcelled importance to the economic climate of British Columbia.

The city of Nanaimo was incorporated in 1874, and the immediate area which this brief will endeavour to cover represents a population of 23,000 people and is the major distributing point for 110,000 people to the north, and the balance of a 226,000 population to the south. The major part, I might add, is in the city of Victoria and the surrounding district. We have in this brief set out the average temperature, precipitation and sunshine, which I shall not endeavour to go through. They are there for your perusal, and they would indicate that our climate is quite temperate; that our average sunshine is somewhat above average, and that generally we enjoy a very amiable climate.

The city is governed by a mayor and six aldermen. It is policed by the Royal Canadian Mounted Police under a contract. The city building code, electrical code, and sanitary

regulations conform to the laws prevailing in British Columbia. The city has a fire chief, a deputy fire chief, and 13 full-time firemen, and 15 volunteer firemen. The water pressure in downtown Nanaimo is 120 pounds.

Nanaimo, recognized as an important wholesale and retail distributing centre, has been zoned for industry. There are 59 acres zoned for light industry and 104 acres zoned for heavy industry. There are desirable rail and water sites available for construction of warehouses and factories. Recent expansion of municipal boundaries has resulted in a considerable increase of industrial acreage.

Nanaimo's geographical and central location places the city in an enviable position as a distributing centre, when we realize the tremendous expansion of new developments that are presently under way to the immediate north and south of Nanaimo.

Within the past three months announcements have been made by leading producers which will mean the spending of over \$112,000,000 on Vancouver island. The latest project, announced in June, is a \$13,500,000 expansion programme that will boost the total capital construction plans of the Elk Falls Company Limited, at Duncan Bay, to \$28,500,000. This announcement follows closely the decision of the British Columbia Forest Products Limited to construct a \$25,000,000

pulp mill at Crofton. MacMillan & Bloedel Limited just recently announced expansion of their Port Alberni plant, and work is already under way, with an expenditure of \$58,000,000. In addition, two new mills will be built. At Harmac, just outside Nanaimo, MacMillan & Bloedel Limited is operating a \$40,000,000 bleached kraft pulp mill. This we understand is the largest bleached kraft pulp mill in the world.

One other major requirement of our development is a good water supply. In 1954 the greater Nanaimo water district was formed to amalgamate the various water districts in the area, and improve water supply and distribution facilities.

The premier of British Columbia in June declared that this section of Vancouver island is destined to become "one of the largest industrial areas in Canada," and the premier's Minister of Highways, Hon. P.A. Gagliardi, stated that Nanaimo could well become "the Pittsburgh of the west." He was referring to our vast iron and coal deposits and the abundance of power that would be available through electrical expansion on this portion of Vancouver island.

We have additional advantages which we list briefly.

Forest products. Our vast forest products are well known the world over. Magnificent stands of softwood timber cover

Vancouver island, and in general, forestry operations are of first importance. Logging and the manufacture of wood products are carried on throughout almost the whole extent of the region. Coal mining in the Nanaimo area, and agriculture in the beautiful and fertile district to the south, originally attracted settlers to these areas. These enterprises have retained importance, but over the years have become secondary to the forest industry. Logging now is the principal primary industry of Vancouver island, where the annual timber cut exceeds that of any other region of British Columbia. Some reference will be made later on in the brief to figures which bear out this statement. In 1951 woods operations on Vancouver island directly employed 13.0 per cent of the labour force.

(b) Fishing. Commercial fishing is an important industry in the waters around Vancouver island and the Fisheries Association of British Columbia, we are advised, are presenting a brief to this commission. No doubt they will be filling you in with more of the details. They will submit factual data regarding the fishing industry in this area. The Fisheries Association of British Columbia stated that by 1975 the demand for our products of the sea will have reached unprecedented proportions, and there is no doubt that the next 20 years will offer a

challenge to the industry.

(c) Minerals. Only two years ago coal mining was one of our leading industries, and at one time in our area employed 3,000 workers. Today those deposits of coal still exist in the greater Nanaimo area, in addition to known substantial iron ore deposits.

By way of digressing, I was interested to hear the honourable the Attorney General remark on what he thought the development of the coal industry in the province would be. We in Nanaimo still have substantial amounts of coal under our streets and under our adjoining areas, and they are something which I feel in the future will have to be looked after with very great care, to see what can be developed from the coal as well as the heat it can generate.

(d) Power. Electrical power in sufficient quantity is available for successful industrial development and automatic progress, in addition to the tremendous potential. Increased electrical power on Vancouver island through new plants of the British Columbia Power Commission alone exceed \$29,000,000 in new dams and plants. In addition, as His Worship Mayor Harrison said, the British Columbia Electric are constructing a cable across to Vancouver island to take care of our further needs in regard to electric power.

Year round port. Nanaimo is

blessed with an all year round open port and it is our firm conviction that further effort should be made to increase and improve our existing port facilities in order that we, situated as we are in the centre of a million people (Victoria, Vancouver, Burnaby, New Westminster), could well serve the economic needs of not only our domestic markets, but the trade lanes of the world.

Transportation. Nanaimo is the main port of entry for northern and southern Vancouver island and in the foreseeable future we could well become the major port for the entire Vancouver island. A safe, large, and well marked harbour is now supplied with some wharves including the recently constructed and modern Canadian Pacific Railway sea and land terminal dock. Frequent ferry service to Vancouver by Canadian Pacific Railway and Black Ball Ferry Lines, in addition to the ferries plying to the many islands adjacent to Nanaimo, have made this city a veritable funnel for island traffic. This includes daily scheduled barge service for railway cars and large trucks. The city is served by ship, bus and rail. Until some 2 years ago we were also served by air. ~~There~~ is an air strip at Cassidy, which at present is not being served by a scheduled air line service. We will refer to this later. Of course we also enjoy deep sea anchorage.

Climate. The salubrious climate makes this an ideal vacation-land and place to work and live. Our climate is mild and we have no bad seasons. Rain when it comes is moderate, in periods of a few days separated by days of brilliant sunshine. I may say that today is not an example of our usual climate. This is Victoria, by the way, 75 miles south of Nanaimo, so we do not want you to take this as a sample. Summer weather is tempered by cool breezes. There is no muggy weather and no mosquitoes. We are famous for our high percentage of sunshine, all year round golf courses, and roses in December. Ours is a climate which invites you to vacation in our evergreen playground..

Communications. Nanaimo is served by Canadian Pacific Telegraphs, British Columbia Telephone Company, radio station C H U B, the Nanaimo Daily Free Press, and served also by the daily newspapers of the metropolitan areas of Victoria and Vancouver.

Improvements required. Submitted for study to the federal authorities through your commission.

(1) We urge that greater development in the processing of our natural resources be instituted, and we attach herewith a list of some of the products which can be manufactured from the products of our forests. This is the important

part of our brief. I will not attempt to go into it at this time, but it is there for your perusal. We now have some reference made to the value and quantity of logs and other finished lumber products which have been exported from British Columbia and from Vancouver island.

a. In 1954, 27,838 M board feet of raw logs were exported from British Columbia with a value of \$1,299,267.

b. In 1954, 235,934 tons of logs, poles, and pilings were exported from Vancouver island, and 301,295 tons from the entire province.

c. In 1954, 2,626,831 M board feet of lumber were exported from British Columbia valued at \$210,382,685.

d. In 1954, 1,132,740 tons of lumber were exported from Vancouver island.

e. In 1954, 6,694,142 square feet of plywoods were exported from British Columbia valued at \$1,113,758.

f. In 1952, the estimated net value of lumber only, Vancouver island, was \$36,925,800.

g. In 1952, the estimated net value of lumber only, for the whole of British Columbia, was \$154,069,375.

The forest wealth of Vancouver island percentagewise in comparison to British Columbia:

British Columbia -- 132 billion cubic feet.

Vancouver island -- $24\frac{1}{2}$ billion cubic feet, or approximately 18 per cent.

British Columbia in value -- \$4 billion, average value \$3 per thousand -- all species.

Vancouver island -- \$1 billion, average value \$4 per thousand. (Value of timber on Vancouver island is higher than the average of British Columbia.)

Vancouver island has 18 per cent of the total timber of British Columbia in quantity, 25 per cent in dollars and cents value.

The amount of mature standing timber on Vancouver island:

3,450,000 acres mature standing timber which is $24\frac{1}{2}$ billion cubic feet. We have 1,500,000 acres of new growth on Vancouver island, and the new growth grows at the rate of 108 million cubic feet per year.

The value of our industrial payroll -- British Columbia -- 1954 \$1,070,000,000 (est.)

The value of our basic industries -- British Columbia -- 1954 \$ 892,303,418

The value of our forest production -- British Columbia -- 1954 \$ 528,022,783

The value of our pulp and paper production -- British Columbia -- 1954 \$ 157,700,000 (prelim).

The value of our timber scaled --
British Columbia -- 1954 5,567,422,607 feet
board measure.

(2) We urge that processing of raw lumber to the finished article be encouraged or made mandatory to stimulate employment in this our major industry, also greater industrial development for our many other secondary industries to balance our economy. Statistics, unemployment insurance figures, show Nanaimo has suffered more per capita unemployment during the winter months than other communities in British Columbia.

I might say, by way of example, that the city of Victoria in its very worst unemployment period, the per capita unemployment is about the same as Nanaimo at our very best period. That is one reason we feel that in our central position on Vancouver island there should be more industry encouraged, and our port facilities should be expanded to compensate for this deficiency.

(3) Increase and improve port facilities so that we might better serve the trade lanes of the world. We particularly stress the urgency of completion of our assembly wharf which is of vital importance in serving our import and export trade. There is under consideration, I may say, the construction of a second assembly wharf in Nanaimo. This has been under consideration for some years by the federal

government, and we hope this year will see the completion of the negotiations so we can get back into serving the needs of industry again.

(4) The establishment of the port of Nanaimo as a national port. We feel this is one of the most important things in our economy. This would give us recognition; we feel it would give us a better position as far as the provision of more work is concerned and the establishment of a national harbour board would greatly facilitate the shipping interests.

(5) The establishment of Nanaimo as a terminal point. Nanaimo being the major distributing centre for Vancouver island, terminal rates would bring relief to business at the class and commodity freight rate level.

(6) An over-all and complete study of existing freight rates for all commodities that are imported and exported from this port.

(7) Further continued study and encouragement to the tourist industry by the Canadian government travel bureau in close cooperation with provincial governments and tourist bureaus at the community level. We are suggesting that this royal commission adopt the Canadian Chamber of Commerce policy on tourist industry as approved by the 9th annual federal-provincial tourist conference, in order to secure a greater equalization of our tourist dollar with the United States. We include this resolution

which was adopted by this body:

"Whereas the Canadian tourist industry is yearly becoming a more important factor in the Canadian economy and particularly the traffic from the United States:

Be it therefore resolved that all cities and communities across Canada emphasize the importance of courtesy and cooperation at the community level, and

Be it further resolved that all food catering establishments be encouraged to serve food distinctive of the area and at all times to maintain a high standard of quality and service in their meals."

(8) We urge and recommend the re-establishment of scheduled airline service between Nanaimo (Cassidy, 8 miles south of Nanaimo) Vancouver and Victoria airports. As I mentioned, we did have a scheduled air service until 2 years ago by Queen Charlotte Airlines; but they have discontinued that service, and we feel it is essential that regular airline service be re-established.

(9) We urge that the federal

authorities support the Canadian Chamber of Commerce programme of selected immigration, thus assisting us to increase our Canadian population substantially by 1975. We are still in an era of expansion and we can see no logical reason for a decline in immigration. In fact our expansion is likely to be seriously impeded if such a decline continues. Our future is good and getting better. We are in need of "an inventory of our resources in terms of competent, well-educated, thoroughly trained, highly imaginative men and women to plan, manage and direct our fast-growing economy." Such people range from scientists and engineers to salesmen and highly skilled tradesmen. We need this inventory and we should know our needs as of today and tomorrow. The Canadian people and government will look for the solution to this problem from the royal commission on Canada's economic prospects.

These new people would settle vacant lands, assist in the development of our natural resources and provide an even greater home market for our manufactured products. Our greatest prosperity could be stimulated by a broad policy of immigration. Also, a substantial population increase could be "accommodated with little or no additional governmental structure, local services, or a too expanded highway system. Increased population would rejuvenate languishing communities and more evenly distribute the tax load.

In conclusion, it is our firm conviction that Canada is the land of the greatest opportunity in the world, and that opportunities for the individual will grow proportionately and progressively as our population increases.

Recognizing our vast natural resources and the urgent necessity for the creation of more man-hours, we submit to this royal commission that more employment from our natural resources would protect and strengthen our present vulnerable position by creating and maintaining steady employment via the establishment of secondary industries.

We have asked the consideration of this commission to assist in having Nanaimo established as a national port and terminal point. We therefore submit that greater importance should be placed on the fact that we are a year-round port, and we urge that improved storage warehouses be provided to avoid demurrage charges and to bring Nanaimo facilities up to the standard of others on Vancouver island and the west coast. We would also suggest that Canada return to the system whereby the advantages of the British preferential tariff would be open only to goods shipped through Canadian ports.

We have endeavoured to present our thoughts, opinions and suggestions in the foregoing brief, in a concise manner. We have

presumed to make certain recommendations because a healthy economic climate is so vital to Vancouver island, British Columbia, and Canada.

Our united desire to serve the public of Nanaimo and surrounding areas is reflected in this submission from experience and the combined efforts of a group representing substance and responsibility. We place emphasis upon the fundamental aspects of our economic problems plainly, and to do otherwise would be to fail in our efforts to respect a most important royal commission, and a most learned, respected commissioner.

THE CHAIRMAN: Thank you very much. In discussing your airline service, or the lack of it, was it the Queen Charlotte Airlines that operated previously?

MR. GREER: Yes.

THE CHAIRMAN: What happened? Why did they discontinue?

MR. GREER: I understand that the subsidy lapsed. The boat service between Nanaimo and Vancouver is subsidized, and that subsidy was increased. For reasons best known to the people who did it, the subsidy to the airline was withdrawn, and the Queen Charlotte Airlines could no longer afford to operate.

THE CHAIRMAN: Would it be necessary to have a substantial subsidy to justify such a service?

MR. GREER: It would depend largely on the frequency of the service, I would think. I do know this, that Trans-Canada Airlines themselves may be interested in putting in a triangular service between Vancouver, Nanaimo and Victoria, and that we would very much like to see. We feel it is essential to our progress, and as a matter of fact the airport which is presently being maintained is only used now by the local flying club. It is on lease to the city of Nanaimo from the Department of Transport, and there is a concern just starting up which proposes to run a charter service, but we would like to see that service re-established.

MR. STEWART: How far is it from Sidney to Nanaimo?

MR. GREER: About 50 or 60 miles, I would think.

MR. GRAUER: You make this statement on page 8:

"We would also suggest that Canada return to the system whereby the advantages of the British preferential tariff would be open only to goods shipped through Canadian ports."

Can you give us any idea what that would mean to the Pacific ports?

MR. GREER: We thought we could possibly enjoy some of the eastern trade, and particularly that Hong Kong should enjoy the British preferential. They have so often requested, through their equivalent of our board of trade and chamber of commerce, that possibly we and they would benefit materially by the preferential tariff.

MR. GRAUER: How does that trade come now?

MR. GREER: It is going to the United States now. They are shipping to Los Angeles and Seattle, and they would like a chance at our market.

MR. GUSHUE: What is the reason for the high rate of unemployment in Nanaimo in the winter as compared with other communities?

MR. MUIR: One reason, Mr. Commissioner, is that people were largely dependent upon the lumber industry, and during the winter when the snow is deep the woods are closed down and we have not sufficient secondary industry to keep the men employed in some other type of industry.

The city of Victoria, for instance, of course has a very high employment factor, being the capital city, with the parliament buildings as well as many other substantial industries. We feel we have the facilities there for further industries if conditions were such in terms of

freight rates and in terms of a terminal point. After all, industry is not going to come over and settle on Vancouver island and in Nanaimo particularly, and pay an premium for doing so.

We feel that if these matters are adjusted we can compete with other areas in the matter of attracting industry on an equal basis. Now we feel we are at a disadvantage in that respect; but in our particular location we are fortunate to be the very centre of the island, where all the transportation comes in. In many cases goods being shipped to Nanaimo have to go through Nanaimo itself and down to Victoria, there to be transhipped back to Nanaimo. That is because Victoria is a terminal point and Nanaimo is not.

MR. LUSSIER: I gether that employment in the woods operation is only possible part of the time. Is it possible to get lumber work in the woods on a year round basis?

MR. MUIR: That is possible if weather conditions are satisfactory. As a matter of fact last year I believe we did have about the best year yet.

In the summertime we are faced with hot weather and forest closures, and in the winter with snow, when they cannot get out into the woods to work. That is the reason for the seasonal unemployment, particularly in our area.

I might point out that some years ago when the coal industry was there, as we pointed out in our brief, we employed 3,000 men on a fulltime basis. When the coal mines closed down everybody thought Nanaimo was going to sink into oblivion. Fortunately, through the expanding of the lumber industry and the establishment of a pulp mill there, we have taken up the slack; and we do believe that if more secondary industries, particularly in the woods products lines, come in, we can get back up to the point where we were before the mines closed down; but for many years they created employment for between 3 and 4 thousand men.

MR. LUSSIER: For how many months of the year do you carry on the woods operations?

MR. MUIR: We estimate this year about 3 months.

THE CHAIRMAN: Only 3 months? You mean you will be closed down for 3 months?

MR. MUIR: Yes.

MR. GRAUER: With respect to your municipal services in connection with sewage, education, and one thing and another, are you finding you can finance your way reasonably well?

MRS. HALL: Yes, we do quite well, as a matter of fact. We presently have under survey a greater Nanaimo sewage disposal unit. We have just, the first of last year, inaugurated the greater Nanaimo water board, and

I think our city does not have too many problems to worry about. We have been working very hard to have electricity, power, water and sewage facilities so we can entice industry to come our way.

MR. GRAUER: It is industry you want, rather than financial help from the senior governments?

MRS. HALL: It really is. We are one of the few people who do not come with our hands outstretched asking that they be filled with dollars. We want them to clear the way so we can do it ourselves.

THE CHAIRMAN: That is a remarkable change. Well, thank you very much indeed for this presentation. I know a great deal of thought has gone into this, and it will be helpful to us. We are sorry you could not come on this morning, but we hope you will still be able to get back to your meeting on time.

MRS. HALL: Thank you very much; and if I do not get back to council in time I might have to come back here and ask for these privileges that others have been requesting.

THE CHAIRMAN: Now, Mayor Harrison, would you like to present this other brief? I do not know if you wish to go over it in detail, or whether you will leave it with us.

MR. HARRISON: I will deal with some

of the main points.

Before I do so, gentlemen, I see I have overlooked a small matter, yet it is important; as to what remedy there can be. What is the practical remedy, if any, to the isolated position of any part of the island such as Victoria below 49?

There is, of course, a remedy; that is, if we should develop a trade with the Orient. We hope someday, when there is peace, to supply China and Japan and undoubtedly parts of Russia and countries across the sea.

I would like to show you what I have in mind. Gentlemen, there is a port on the west coast of Vancouver island somewhat adjacent to Victoria which, under certain conditions with which I shall deal, is perhaps the finest port north of San Francisco. If we are going to trade with the Orient, as we will have to undoubtedly, I would draw your attention to this port, Port Renfrew. It is open to the entire Pacific; there are no islands cluttered around it.

When you come to other ports on Vancouver island, such as Victoria and Nanaimo, or to Vancouver, do not forget that there is a boundary line, and that boundary line does not give us the right to the Rosario strait, which is undoubtedly the main waterway. We have to go through what is known as Harrow. This island

which I am indicating on the map is an American island called Waldrun, and the boundary line takes a kink there. These other two islands I am also indicating are American islands. You have to come in between them and along and thence to Victoria or to the open sea. That is one of the great difficulties of coming in there. The Americans took the Rosario and kept it, although as I told you, under the treaty we were to have the free use of the waterway. We have not.

Let me tell you something about that port. If the dominion government were to build two very small breakwaters on the north side, there is shallow ground coming to a rock standing up out of the water, with a whistling buoy and light on it. From there it would be very easily filled with cracked rock to make a vertical breakwater. Perhaps it could be spread out.

The same condition applies almost exactly on the south point. That leaves a harbour roughly four miles long by roughly a mile to a mile and three-quarters wide, with a good holding bottom. By the way, I got the expression "the finest port" from an admiral of the United States fleet.

There are two great rivers running into this harbour which flow all the time. The land area surrounding it is as large as the district of Saanich, if not larger.

This port has been isolated, although governments have promised that road for over 60 years, in my memory. It is the present government that is now building the road over that short distance to make it available to Victoria.

If that were done, and if the trade came through that port, it would be of great advantage in shipments from Victoria, as well as from our good friends to the south.

Then there is a great bank, which is roughly 400 miles wide and 120 miles long, one of the greatest known. It is mainly halibut and also salmon fisheries. But because there is no connection between that west coast and the great cities of the south, Seattle and Vancouver, they have to break their hatch to put down the fish. The great sea cod, running from 20 to 60 pounds, bring about a cent a pound wholesale, while the halibut bring about $1\frac{1}{2}$ cents. Therefore they were thrown away, simply because there was practically no transportation to take the cod and other fish into the big centres.

If that were developed as I suggest, it would certainly put Victoria in an entirely different category. If we had a free port and had the commerce to and fro, then we would have a mighty empire on the south end of the island. But there is no communication; there is no road across the island, gentlemen, except a

little road at one point.

So I suggest, gentlemen, that there is a very easy remedy, and a remedy which we as a nation should take advantage of; that is, to supply our goods from eastern Canada, our goods from central Canada, our manufacturers of the west, and our imports from the Orient, through that port. It is the most practical of the lot.

You saw a very good illustration of what I was telling you about only a few minutes ago, in the presentation by the gentlemen from Nanaimo. They are from the part north of 49, where they have all these assets in the way of minerals and so on. That is in a different category.

You see also, gentlemen that our tourist trade is chopped off, if you will pardon the expression. There is a channel shown here on the chart. Twenty years ago there were about 109,000 American cars coming up from California, and of course they were handled by the little ferry they had there; I forget its name. This year there were over 500,000 cars, headed where? Not for Seattle; headed for here, for Victoria. This trade we are losing because we have no road across there.

I do not know whether you came to Victoria by steamer or by air. It would not make much difference, except this: that the C.P.R. boats, the best they can do it in is about

$4\frac{1}{2}$ hours. The night boat generally takes 8 hours. This is no criticism of the C.P.R., but I do not think they can swing it any faster. If you do you just about rock every little wharf in the gulf islands with the great waves from ships of that displacement. That is why the C.P.R. is not giving us the same service it did some time ago. They go by way of Nanaimo, which is roughly 40 miles. Victoria is roughly about 80 miles, and they have to go through that maze of islands, where you have to look out all the time.

I forgot to tell you that when you want to send a letter from Victoria to Port Angeles or vice versa, across that 20 miles, it has to go all around the Sound and takes a long time. That is the service we have.

Now, gentlemen, the next brief is a very carefully prepared document, yet not as carefully prepared as the gentlemen who prepared it would like.

THE CHAIRMAN: Do you think you need to read it in full? I have looked over it and it is just what we want. I do not think it is necessary from our standpoint for you to read it.

MR. HARRISON: Oh, you have read it through?

THE CHAIRMAN: Yes.

MR. HARRISON: If that is the case,

all I need say is that it is full of very carefully prepared data. I know its contents, and it is an excellent document. If there are any questions you would like to ask on that document, Mr. Wyatt is here, a man with wide knowledge of figures and so forth.

Also, gentlemen, if you think of anything after you have left Victoria, or if there is anything further you would like, if you have the time I will tell you what I would like you to do. I do not know whether it is possible, but if you could take a plane and go over the south end of Vancouver island south of 49, from Ladysmith across to Ucluelet, I would like you to do it. Then you will see what is back of our timber resources. You will see it at first hand, and I will not have to tell you about it.

I point out to you on the map parallel 49. See Cowichan Lake; you will be surprised. See the rest of it right on down; that will give you an idea of what we have.

THE CHAIRMAN: I would like to ask Mr. Wyatt in particular about your problem of financing. I see you have touched on it here in this submission. Do you expect to be able to finance these required expenditures substantially without assistance from other governments?

MR. WYATT: Well, no, Mr.

Chairman. As indicated in the brief, it amounts to nearly \$220 million of anticipated expenditure over a period of 25 years. This, as you can appreciate, is a very sizeable amount of money in view of the circumstances, which are unusual -- and I use the word advisedly -- in the city of Victoria.

The suggestion contained in the last paragraph of the brief, however, does provide a compensating factor which I feel, if that were employed as suggested, would contribute very materially to the financing, together with that which might be done by current taxation.

THE CHAIRMAN: That is a suggestion, of course, that we have heard in other parts of the country from other municipal authorities; that the first thing, in their opinion, which they would like to see accomplished would be the payment of taxes by federal and provincial authorities on their buildings and other facilities within the municipal limits. But in some other places the municipalities have not felt that that alone would be sufficient to provide them with the necessary revenues which they require, and they have gone further in their suggestions. That is why I wondered whether in your case this would do the trick.

MR. WYATT: Well, sir, the circumstances in the other municipalities may not be quite the same as they are here, where our

holdings of property by the upper levels of government are considerably more than the average Canadian municipality.

THE CHAIRMAN: That is quite so.

MR. GUSHUE: Are there grants now in lieu of the payment of taxes by the senior governments?

MR. WYATT: This year for the first time the city of Victoria will be able to take advantage of that federal municipal subsidy grant; that is the 4 per cent, which came into effect this year, will provide the city of Victoria with something slightly in excess of \$70,000. This is the first time that has come into effect.

The provincial government have provided last year and this year what is known as the capital city grant of \$50,000 each year. That is used particularly for the beautification of the city, and has been used primarily on the roadways adjoining the water front.

THE CHAIRMAN: Well, thank you very much Mayor Harrison and Mr. Wyatt. We are grateful to you, and we find these briefs very helpful and valuable.

THE CHAIRMAN: The next submission is that of the Victoria Chamber of Commerce, which will be presented by Mr. Dunn.

MR. DUNN: Mr. Chairman and gentlemen, I see the hour is getting late, but we have a very short presentation. Primarily I think you have before you a very excellent report, which is just a year old, entitled, "The Capital Region Takes Stock".

I think you all have copies of this brief. Would you like me to read it?

THE CHAIRMAN: Yes, please.

MR. DUNN: Greater Victoria stands today at the threshold of what could easily be a period of tremendous growth. What appeared at first as a small post-war population expansion, likely to reach a plateau and cease, has persisted. It is increasing and compounding.

In 1941 population was 75,560; in 1951, 104,303, an increase of 37 per cent. Only three years later the capital region planning board forecast that our population will be 206,000 by 1981. This would mean an increase of 171 per cent in 40 years. The present rate of growth is surpassed by only three other major Canadian cities.

The future rate of growth, and thus the general prosperity of the area, could be lightly or profoundly affected by a number of factors, but there are three very important

influences on Victoria's economy.

(1) In the southern portion of this island, the climate is strongly affected by warm winds from the Pacific ocean. As a result it is remarkably mild. Heavy snowfalls are rare, severe frost is unusual, and precipitation is moderate. This, combined with scenic beauty and varied recreational opportunities provides a strong attraction to visitors and retired people.

(2) This is the capital city of British Columbia, and as such its growth will be influenced greatly by the general growth of both the province and the dominion.

(3) Being on an island, greater Victoria is almost entirely dependent on water transportation. Apart from a relatively small amount of air freight, all freight between Victoria and the mainland must be moved by water. Similarly, so must all vehicles and the people who drive them.

Quite often it can be observed that a single factor is on a pinnacle in its effect on the daily lives and prosperity of a community. Its presence or absence may determine the course of a city's destiny.

We are not attempting to convey the impression that in the case of Victoria there is only one factor upon which prosperity depends. Such a statement would be patently wrong. We hope to develop more industry, more

tourist trade, better conditions, facilities, and surroundings for our citizens and visitors. All these will have some bearing on our prosperity.

In all our studies and surveys, however, we keep returning to one fact. It stands out above all others. Our respect for its importance continually grows. We are referring to our dependence on water transportation. In our minds this has assumed the utmost significance and we would refer you to Appendix B herewith which deals with this topic in greater detail, and to which we commend your utmost attention. We were going to have a much lengthier report on our water transportation, but we felt this was a summary of it, and you could perhaps follow it more readily.

Industrial prospects: Turning to industrial prospects we notice a steady growth in basic industries and the acquisition of new, diversified secondary plants.

In the past five years local firms have begun to manufacture plywood and veneer from native woods. These have found a ready market and the output is increasing. We believe that new techniques and the development of new products will continually enlarge this industry.

Our local shipyard have displayed an ability to adapt their talents to industrial design. With the prevailing slackness in marine

construction and refits, both major yards are employing some of their 1500 employees on work for refineries and other industries.

Local towing and salvage firms have achieved a pre-eminent position in their particular field. One local tug now is completing the longest tow of a disabled vessel in marine history. Other tugs, of the same firm, completed the longest multiple tow in history last year. This firm operates the largest and most efficient salvage tug on the Canadian west coast -- without any subsidy, I might mention. It has shown unusual enterprise in developing new log-carrying barges and in diversification of its operations wherever opportunities arise. With marine transport growing steadily each year, the expansion of local towing and salvage operations seems assured.

Cement of high quality is manufactured near Victoria. The plant has expanded greatly during the past few years and the growing use of this product ensures a healthy future.

There are many other industries that have established themselves and which show normal growth. These include paint and patent roofing products, pulp, paper, and shingle mills, foodstuffs, clothing and beverages. As a special example of one industry's alertness we note that it is building log-barkers for installation in many British Columbia mills.

Next year it probably will export these machines to the Antipodes. As markets expand, these virile firms will grow.

This area is able to grow a wider variety of horticultural and agricultural products than any other region in Canada because of its temperate climate. The future of diversified agriculture is exceedingly bright, limited only by the amount of arable land available.

Fisheries: products of the sea form a large part of modern diet. Science is finding new sources of food in the sea's depths. We are ready and able to aid in this increasing harvest.

It is difficult to forecast adequately in this short brief the future of our region which holds great promise for an abundant life.

Future prospects have been aptly reviewed, however, in a survey entitled, "The Capital Region Takes Stock". This book was prepared for the capital region planning board one year ago by Mr. J.W. Wilson, P. Eng. It is a pleasure to submit a copy of this volume as Exhibit A. It is a lively, readable document under which we cannot improve and for which we acknowledge our debt to the capital region planning board. In particular we draw your attention to page 53 of that volume, where there

is a summary of the thoughts of Mr. Wilson.

The capital region planning board, I might mention in a little detail. In 1951 the provincial government recognized that the capital region required planning, and designated Victoria, Oak Bay, Esquimalt, Saanich, central Saanich and Sidney as making up the capital region area of British Columbia.

As businessmen we are glad to see the expansion taking place in this province. We in greater Victoria know this expansion will result in more business for the capital city. In that sense our orbit is wide. Our outlook must be equally broad. Nevertheless our economic vigor will depend on our aggressive attention to local matters.

The area has natural assets that could make it the Florida or Atlantic City of Canada if properly helped. It is ideal for retirement, a vacation centre, and a convention centre. We anticipate that facilities presently being planned will result in thousands more visitors and residents coming here.

There are problems attendant on the growth of a city or municipality. Services become either inadequate or obsolete. New demands must be met which impose a strain on civic and municipal financing. Some thought must be given to relief at the federal and/or provincial level for municipalities.

Victoria has a special problem.

We have the highest percentage, 18 per cent, of retired people of any community in Canada. I think is opposed to a national average of about 7 per cent. These senior citizens are both a strength and weakness. Our community life is enriched by their presence. We welcome them and look forward to many more of them coming. However, in spite of advances in old age pension legislation, many of them still lead lives of marginal existence and need financial help from municipal coffers. These fine older folk have lived their productive lives in other parts of Canada and although they are Victorians now, they are first of all Canadians. As such they are in need of, and should receive, further sympathetic consideration by federal authorities.

These problems are real, but although important, they take second place alongside the main one, which is adequate water transportation. This vitally affects the cost of living of every citizen. If our need for this is great now, it will become greater with time. With it our progress will be accelerated. Denied it our progress will be inhibited.

Such a life will be their lot in this pleasant land.

All of which is respectfully submitted.

THE CHAIRMAN: Thank you very much.

You mention in your summary that thought must be given to relieving the municipalities, and that the relief must come from the federal and provincial levels. Mr. Wyatt, in an answer to our inquiry on that score, suggested that in the case of Victoria, if it was permitted to tax the federal and provincial properties in this area, that would overcome the problem as far as Victoria is concerned. Do you agree with that, generally speaking?

MR. DUNN: I do, yes.

THE CHAIRMAN: Then you suggest, in talking about the retired people who are living here, that they should receive further sympathetic consideration by the federal authorities. What specifically do you suggest?

MR. DUNN: Well, there again I think perhaps it was the thought that the pensions many of them are receiving are perhaps not adequate at the present time.

MR. GRAUER: I was just looking at appendix B. You say your No. 1 problem is water transportation?

MR. DUNN: That is the feeling.

MR. GRAUER: Your proposed solution is along the line of fast ferry service, is it?

MR. DUNN: Yes, a fast ferry service. The type of transportation which was very useful in the early years we feel is now past. I might mention that at this time there

is a company presently investigating the possibility of operating that fast ferry service to the mainland.

THE CHAIRMAN: That is for passengers and automobiles and trucks?

MR. DUNN: General freight, except boxcars.

MR. GUSHUE: You say you have reason to believe that service will be established, or you are optimistic about it?

MR. DUNN: Well, we are optimistic.

MR. GRAUER: Have you any reason to believe that will need to be a subsidized service?

MR. DUNN: Well, we asked the company that question specifically, and they said they were not looking for a subsidy.

MR. GRAUER: They think it can be done as a straight matter of economics in business?

MR. DUNN: Provided the other companies give that one company a chance to establish itself. That is the main thing.

MR. GUSHUE: Give it a wide berth?

MR. DUNN: Until it is reasonably established.

MR. STEWART: I noticed that Nanaimo suggested it could become the Pittsburgh of the west, or somebody suggested it. Presumably

you could be also, but you have suggested you might become the Florida or the Atlantic City of the west. Are those not competing towns? Will you not have to make up your mind what you want to be.

MR. CROMBIE: Well, we would rather have the sunshine and let them have the soot.

THE CHAIRMAN: Well, thank you very much, Mr. Dunn, for this brief, which we will label Exhibit 76.

THE CHAIRMAN: Now, Mr. Tolmie and Dr. Camsell and Mr. Wardle are here to present a brief on behalf of the North West Power Industries. We have asked them whether they would prefer to present the brief this afternoon or tomorrow morning, and I gather, Mr. Tolmie, that you would prefer to carry on and present it now?

MR. TOLMIE: I think so. We will not be very long, if it does not hold you up too long.

THE CHAIRMAN: Just before that, I forgot to ask Mr. LePan if he would table the brief of the municipal corporation of Saanich and explain why he is doing the tabling.

MR. LEPAN: Early in the afternoon the reeve of the municipal corporation of Saanich, Mr. J.W. Casey and Mr. Stuart Brock, a councillor, were present here in order to file with you the brief of the corporation. Unfortunately they had to leave in order to keep an engagement which they could not break, and they have filed with me the brief of the corporation. I said to them that I would have it placed on the record and I have given them the assurance that their brief would have the same status as it would have had if it had been presented by the reeve in person, and would receive the same consideration.

THE CHAIRMAN: Thank you. We will

mark their brief Exhibit 77.

Now, Mr. Tolmie, while we are handing out numbers we will mark your brief Exhibit 78.

MR. TOLMIE: Mr. Chairman and gentlemen, if I might introduce our group to you, on my right is Mr. Wardle, who is consulting engineer to the North West Power projects, and on his right is Dr. Camsell, who needs no introduction to you, who has been associated with Ventures - Frobisher and Quebec Metallurgical industries and through that with North West Power since his retirement as deputy minister of mines. On his right is Mr. Ladner, our British Columbia counsel.

With your permission I shall simply introduce the subject, because it is largely an engineering matter, and Mr. Wardle can present the bulk of the brief, and Dr. Camsell will conclude it.

Northwest Power Industries Limited is a company organized and financed by Ventures Limited, Frobisher Limited and Quebec Metallurgical Industries Ltd. chiefly to develop a large block of low-cost power for electro-metallurgical and electro-chemical reduction. It is the outcome of a long search conducted by the Ventures interests for low-cost hydroelectric power in Canada, near tidewater and within economic reach of adequate mineral resources.

This search dates back to before the war. During the war the programme, like many others, had to be shelved and the Ventures interests devoted their energies to producing strategic metals and minerals.

The Ventures group of companies has a long record in the development of mineral resources and metal production. As metal production, alloys and like products become increasingly demanded, the need for economical electrical power is steadily enhanced.

The mineral development of the region in northern British Columbia and the Yukon territory where the power project is to be established will produce an ever-increasing flow of raw ores and concentrates. Smelters and refining plants for these and other metals will be required in northern British Columbia or the Yukon as development proceeds. Northwest Power Industries proposes to reserve adequate power for local treatment of such concentrates.

The officials of Ventures Limited and its associated companies are negotiating with other producers of primary metals and alloys with a view to a joint development of the large hydro power resources in the area under review.

Now if I may call on Mr. Wardle to deal with the power projects themselves.

MR. WARDLE: Mr. Chairman and commissioners, I will start reading on page 3 in

section 2, the heading being "The Power Projects."

The major power development planned by Northwest Power Industries provides for the beneficial use of the headwaters of the Yukon river and its upper tributaries, and of the waters of the Nass river to the south. Yukon waters have their source in the Yukon Territory and northern British Columbia and flow northerly, while the Nass river watershed is wholly in British Columbia and drains into the Pacific ocean. These sources of power are closely related and, when developed, one will be complementary to the other.

Extensive surveys and engineering studies of the Yukon river project have been made by Northwest Power Industries Limited over the past three years, and this development will, by the end of 1956, be in the design stage. Office studies of the Nass river power possibilities have been under way since May of this year, and field work began early in September. To date, field investigations have been largely of a reconnaissance nature to determine the best site for a power dam and practical sites for necessary storage dams.

The economic feasibility of the Yukon river project is becoming established, and investigations made to date of the Nass river area show most promising possibilities.

The Yukon river power plan, known as the Yukon-Atlin-Taku power project, involves the

diversion of upper Yukon waters southerly into British Columbia and as these waters naturally flow through Alaska to the Bering sea, there is a potentially serious international factor involved. With these international complications affecting development of the Yukon river plan, the company has proposed that the Nass river project be a first stage development of the over-all Northwest Power project. The Nass river, being a wholly provincial stream, comes entirely within the jurisdiction of the province of British Columbia. No jurisdictional delays are involved. The Nass project has the advantage of a Canadian seaport within 25 miles of the proposed power plant. It also has the benefit of later exchange and integration of power output with that of the Yukon river project.

Construction on the Nass project could be undertaken as soon as engineering investigations have confirmed the economic feasibility of the project. These favourable circumstances made the Nass river proposal an excellent interim development.

It is the intention, subject to the approval of British Columbia, to carry out extensive field surveys and investigations of the Nass development in the 1956 season, while at the same time completing the present engineering programme on the Yukon project.

It is estimated that the ultimate

power potentials of the over-all development,
as at present visualized, could be as follows:

Yukon-Atlin-Taku project	-	4,900,000 H.P.
Nass river project (minimum)-		<u>455,000</u> H.P.
Total		5,355,000 H.P.

On the page just following this page, gentlemen, there is a map, a photostatic map, showing the relation of these two power areas. Power area No. 1, to the north, embraces the Yukon-Atlin-Taku project, and the Yukon basin there would draw water from 29,000 square miles. No. 2 is the Nass river power area, with a drainage basin of about 5,200 square miles.

Eventually we would plan to transfer power from the larger Yukon to the Nass river power area, if we became in need of more power down there. The brief gives further details of both these developments, but in order to save time I will give you a summary, and I think we can just cut the time in half by reading this summary to you.

The Yukon itself is not a good power stream. It has no concentrated fall or head either in Alaska or Canada, and without that there is no possibility of economic development. For many years steamboats have gone up and down the river for a distance of 400 or 500 miles, so obviously there cannot be any very serious rapids or falls on the river. So

conditions on the Yukon are bad from the power standpoint.

Obviously, then, any power development on the Yukon river itself, or on its natural channels, would have to be through a series of long, very expensive dams, covered with ice in the winter, in order to get the runoff in the spring, and would not provide an economic development at all.

There is, however, a very attractive alternative of reversing the flow of the upper Yukon waters and carrying them from Atlin lake to the low valleys in British Columbia to the south.

If you would turn to just past page 10 in the brief, there is a map in the approximate scale of 16 miles to the inch, from which probably you can follow the summary I am giving now.

This reversal of the upper flow of the Yukon river would be achieved by a key dam on the Yukon river at Miles canyon, some 4 miles south of Whitehorse. That is shown on the map, and there is a damsite there. Any scheme utilizing the upper Yukon waters I think would have a dam at that point.

Our plan would be to raise the water levels of the lakes to the south by this dam, having in view that the Yukon river flows north, which would permit use of the water by

power companies at comparatively low levels south of Atlin lake.

Not only would this plan give two drops of 1090 feet and 500 feet respectively, but it would provide a key storage reservoir to contain the surplus flow of the river during the summer months. A third benefit would be partial flood control of the Yukon river through holding back the peak of the floods in storage. It is the last foot or two of flood waters that cause the damage, and this dam of ours would remove that hazard.

Later on, if desired, tributary waters of the Yukon river north of or down stream from the Miles canyon dam would be stored in a lower reservoir. The dam for the lower reservoir is shown at the top of the plan. They are alternative dam sites there, probably at the mouth of the Takhini river, where we have selected two dam sites. We do not know which is the better, but our geological investigations will show that.

Then the Teslin river is the largest tributary of the Yukon river in Canada. It is shown over to the east of the Yukon; in fact it is a bigger stream than the Yukon, and probably has 2,000 cubic feet per second greater flow than the Yukon river itself. Part of the Teslin flow might be diverted by gravity to the upper reservoir formed by the Whitehorse dam, and

if that is not feasible it would be carried down actually to the lower reservoir, and water as required would be pumped into the upper reservoir.

A valuable feature of the Yukon project is that it permits stage construction. If you will just turn to the next photostatic map, which shows tunnels, power plants and industrial sites, I think it will help you to follow me from now on.

Initially some 250,000 or more horsepower would be developed using pioneer tunnels; and gradually as the market for power grew, say over a period of 12 or 15 years, the output could reach 4,300,000 horsepower, and eventually 4,900,000 horsepower. Of course Northwest Power Industries fully appreciate that the market is the controlling factor in connection with the development of this power. We do not have a grid to pump it into, as you do in industrial areas, and we will have to see that we keep pace with the market. We may lead it a little or sometimes we may lag a little.

Looking at this map, you will notice the lake in the upper left hand corner, and there is a tunnel there 7,700 feet long, that will carry Atlin waters into this lake.

There is an interesting feature here, and that is that this lake is 190 feet higher, but we will lower the level of Sloko lake and save ourselves 2 or 3 miles of expensive

tunnelling.

To be sure of that, a year ago March we undertook very complete soundings of Sloko lake, in the winter. Some 535 soundings were taken, and we found that after we lowered that lake 190 feet, we still had a minimum cross section of 28,000 square feet; so with a flow sufficient to permit an ice cover, we still would have ample channel to carry the water along. Then you will see a tunnel leading to the construction plant from the end of Sloko lake.

You will also notice a dotted red line going down to the Nakonake river, by way of a tunnel 10 miles long. If you just consider the Whitehorse water we catch at Miles canyon, we would have there 880,000 horsepower, which represents our major initial development. However, we have marked there 2,800,000 horsepower, because eventually if this thing goes along over the next 10 or 15 years, we would hope to have 280,000 cubic feet a second available at that point, in which case we would have the 2,800,000 horsepower which is marked here.

The diversion of some Yukon river water southerly to British Columbia that would normally flow through Alaska creates an international aspect, particularly from the navigation standpoint, which we think could considerably delay the Yukon project.

Now, in regard to the Yukon project we of course have been proceeding along with it. We had an industrial site on the Taku river, you will notice, which is northeast of the international boundary. We have put it there to comply with the policy that Canadian waters that will produce power should have their plants in Canada, and if at all possible the power should be used in Canada. So we have located the industrial site, as you will note, on the Taku river.

That is not a perfect site, but there is no doubt that it can be utilized. We had Sir Alexander Gibb and Partners, consulting engineers, of Toronto and London, make an inspection just 2 years ago, and they decided that it was not practicable to try to dredge out the Taku river for a navigation scheme to carry ores or concentrate and so on out. They thought the Taku river during the summer flows could carry enough barges with our construction equipment for dams and access roads and that sort of thing.

They thought the industrial site was quite all right. That one shown on the south of the river is the easiest one to develop.

In addition to that, about a year ago or a little over a year ago, Bosco Services Limited were brought up to Canada by the Minerals Mining Company, and three very prominent engineers went up and examined the Taku river site. They

found then that this site was sufficient for their requirements. They had some doubt about it, but they found it was sufficient; and they also went along to the extent that they wholly endorsed the project for the first 880,000 horsepower. At that time we did not have enough information to supply them whereby they could reasonably pass on the greater total; but they were quite satisfied with the first 880,000 horsepower which we will obtain, as I have mentioned, from the Miles canyon dam at Whitehorse, which will not be too large a dam, perhaps 120 feet high and 428 feet long, which is very fortunate.

Just before I went on to the question of the industrial site I had mentioned the international aspect that could delay our Yukon project. As a result of this, Northwest Power Industries has in the past few months looked for another power area that had no international complications and yet would be near enough to the Yukon-Atlin-Taku project to be included with it.

The Nass river project should be the answer. Its mean flow is quite large, and its storage gives a dependable flow of nearly 28,000 cubic feet a second, which would be available. We would only plan to use about 25,000.

This project, that is the Nass,

involves the construction of a power and storage dam on the river some 60 miles from its mouth, to give an average head of about 215 feet.

Just after page 15 there is a map showing the general area. In the lower right hand corner of the map is the storage and power dam. It shows a new road that is being built there, from Watson lake down. Some of it is already passable.

The map also shows storage dams proposed on Bowser lake and Meziadin lake. It is going to need further storage dams up the Bell-Irving river, not far from Owlet creek, but we have no information on what the terrain is there, and it is not marked on the map because when we prepared this map we did not know we would need still further storage area.

MR. GRAUER: Do you need that proposed storage dam at Owlet creek?

MR. WARDLE: Below it, on the Bell-Irving river.

MR. GRAUER: Would that increase the capacity of the generator?

MR. WARDLE: Well, we have lots of water, and the thing is to store what we need. Our main storage dam gives us about 400,000 or 500,000 acre feet, and the two lakes, Bowser and Meziadin, give us another 2,000,000 acre feet, and still we are shy about 300,000 or 400,000 acre feet in our programme diagrams,

so we think we may have to have another there. Of course we do not have to have that right away; it depends on how it goes.

In addition to the storage provided by this main dam, that is the lower one on the Nass river, reservoirs can be created by dams at the outlets of Maziadin and Bowser lakes. The Bell-Irving river is the main tributary of the Nass, and further storage in this valley can be established as required.

With the head and flow mentioned, that is in the brief itself, an installation to give 455 thousand horsepower seems warranted. Generating units would be installed up to this figure to keep pace with the power demand. This hydroelectric power would be transmitted to the proposed industrial site at tidewater at Alice Arm by a line about 25 miles long.

When the output of the Nass river plant is nearing capacity, we have planned to have the Yukon project under way, and eventually to transmit large blocks of power to the industrial site at tidewater from the Yukon project in addition to the power that we will be using on the Taku industrial site.

The estimated length of the transmission line from our Yukon plant down to the plant on the Nass river is 360 miles. It has been inspected, and no great construction difficulties are apparent. Furthermore, in

selecting a route, rather than select it by a map and then fly over it twice, this route is fairly well sheltered, with no elevation over 3,000 feet above sea level. Intensive field surveys are being planned for 1956, and if results are satisfactory construction could commence in 1957. We have access roads and trails to build, and we will have to improve our plant landings and other matters like that.

Now, gentlemen, that completes the technical section on power, and I would like to read page 16 of the brief under the heading "Water Right."

The water rights involved in the Yukon-Atlin-Taku area are subject to the jurisdiction of the province of British Columbia and of the dominion of Canada. From the dominion, Northwest Power Industries has received a priority permit, valid until August 18, 1956. British Columbia placed a crown reserve on the provincial waters and area affected, and has entered into an agreement with the company under which, in consideration of the company putting up a deposit of \$2½ million and undertaking to carry on its survey and engineering studies during 1955 and for such longer time as the Minister of Lands and Forests may permit, the government of British Columbia will, within four months of December 31, 1955, or at such later time as the minister shall

determine, issue to the company a conditional water licence.

The waters and areas affected by the Nass river project have been placed under crown reserve by the government of British Columbia, and permission was given to the company to conduct surveys and engineering studies of the river in the fall of 1955.

The international situation affecting the Yukon-Atlin-Taku project is beyond the control of the company. These are matters which must be resolved by the governments concerned. We have had the fullest co-operation of the government of British Columbia, and I would like this little addition to be incorporated on page 16 of the brief.

Northwest Power Industries Limited has taken due cognizance of this international situation and is making its plans with due regard to the realities and possible delays involved. Meanwhile the need for adequate sources of economical power for metallurgical development continues. For this reason, the interim and first state development on the Nass river has been planned, without detracting in any way from the development of the much larger block of power on the Yukon-Atlin-Taku watershed.

That is as far as I go, Mr. Chairman.

MR. TOLMIE: We will hear from Dr.

Camsell now.

MR. CAMSELL: Mr. Chairman and gentlemen, there is just a very short summary. There is a page on the present situation, and a short presentation to follow that.

Negotiations are proceeding at present with a number of strong associates interested in participating with the Ventures group in early development of the Nass river power potential. These associates, along with the Ventures group, contemplate the establishment of metallurgical industries, in that area, based on the hydroelectric power. The use of the power must be synchronized with its development, so that no idle industrial capacity exists prior to power being available, or vice versa. Likewise, the maximum utilization of the power potential is planned, so as to achieve the greatest efficiency and therefore the lowest cost per kilowatt hour.

The planning of Northwest Power Industries is for the continuation of detailed and definitive engineering studies of the whole hydroelectric development of the northwest of British Columbia with special emphasis on the Nass river in 1956, with the objective of completing that project at the earliest moment compatible with sound engineering and economics, as the first step in the production of hydroelectric power in northwest British Columbia.

In the year 1956 the detailed

engineering for the Yukon-Atlin-Taku development will be sufficiently advanced for design purposes. When the respective governmental authorities having jurisdiction over these waters have cleared all necessary authorizations, this larger hydroelectric project can be developed by stages, to meet the requirements of expanding metallurgical industries by then experienced in northern operations.

Now I come to the conclusion. The Ventures group welcomes this opportunity of presenting the programme of power and electro-metallurgical development to your commission. It is our view that a study such as this commission is carrying on will be of invaluable assistance to the nation as a whole and to all branches of business in Canada. Economic stocktaking and realistic projection of the nation's needs and possibilities must precede any intelligent, long-range planning. It is fully appreciated by our group that our plans must fit in with provincial and national planning and policy. And that is something I would like to emphasize. We are always conscious of that. No programme can be successful unless it is in the best interests of the nation and province and has complete public support. We are also very conscious of the responsibility imposed on the developers of natural resources in Canada, particularly hydroelectric resources.

Canada has a great wealth of undeveloped resources, but the important question is, which are within economic reach today, which are capable of early development? We agree with Mr. Rhys Sale of Ford of Canada when he said to the Canadian Club in Toronto earlier this month:

"I am not too worried that we will ever run out of major development projects in Canada. Each day will bring new ideas, new challenges, new tasks. There are hundreds of rivers and waterfalls still to be harnessed for power, thousands of deposits of wanted minerals still hidden in our rock, and a million consumer needs to be met by industry. If there is one thing that can slow down national progress, it will not be a shortage of natural resources, of manpower or of capital. It will be a lack of people with the pioneering spirit, the daring, the skill and the mental equipment to create and make use of the Kitimats, the pipe lines, the atomic reactors and the still undreamed of wonders of our future."

The programme of development as proposed and outlined to you in this brief is based on sound engineering, competent technical skill, and, we trust, an intelligent pioneering spirit that is prepared to plan for the foreseeable future.

All of which is respectfully submitted; and I may say on behalf of the Ventures group that we appreciate the opportunity, or perhaps you might say the privilege, of presenting this brief to the commission, because we are convinced that we are dealing here with one of the most important projects that may come to your attention.

I might say in this connection that you will have come to the conclusion yourselves that this is purely a factual brief; that there are no opinions of ours expressed in it, and I think the reason for this is this; that having presented the facts to you, you as a group are probably in a far better position to draw your own conclusions than we who have perhaps only a limited outlook on this particular field. You have the background of all the projects that have been presented to you in the various briefs you have received and will receive as you go through Canada.

There are certain conclusions, of course, that I would be individually prepared to draw; but whether or not that is desirable it is

for you to say.

THE CHAIRMAN: We would be very interested in hearing your personal conclusions.

MR. CAMSELL: First of all I want to say that I have read the brief of the Northwest Territories administration and the brief of the Yukon government, and with those two briefs I am in pretty well agreement, particularly in that they stress the necessity in the development of our north country of the provision of transportation, of highways and in one instance of a railway.

The railway with which they deal is one which I recommended to the government at least 10 years ago, and I am glad to see that it is being revived again and brought to a head.

Those two briefs, I think, are very important. They stress transportation and power development, as I say, as the two major things that should be considered.

All these points that are dealt with in the brief, or in these various briefs, lead up to the question which I think is probably uppermost in the minds of all the members of the commission, namely that in a study of the economic development of the whole of this dominion, you wonder what will be the result in so far as population is concerned.

Well, fortunately I have been able to give a good deal of study to that thought in a portion of Canada which is covered by this

particular brief which was presented to the government of Canada and to the public here about 6 or 7 years ago. It is the result of a study that was undertaken for 2 or 3 years, somewhat similar to the study you are undertaking, in trying to forecast the future.

There was an attempt there to forecast the future of the north country. The area covered was about 1 million square miles of territory, nearly one-third of the dominion of Canada and it embraced, curiously enough, I think two-thirds of the province of British Columbia, half of Alberta, the whole of the Yukon and the whole of the Mackenzie river district. We left out altogether the eastern portion of it, because we started on this thing as a joint project with the United States government, the project known as the north Pacific planning project. While later the United States people withdrew from it, I felt it was so important that it was easy to persuade the government of Canada to continue the study, particularly as we did not ask them for any money with which to do it. We asked the other departments of government to provide the necessary supplies from their own appropriations. The only cost was the publication of this booklet in an issue of about 3,000 copies.

The population problem is not an easy one to solve, and the ordinary methods of

calculating population possibilities do not actually apply fully to this region; nor do they apply to the pioneer region that we are referring to now in northern British Columbia. Previously all population estimates were based upon the amount of arable land. The first estimate that was ever made for the dominion of Canada was made how long ago? It was made 30 years ago, by the International Institute of Agriculture. There they calculated the amount of arable land in Canada, 150 million acres, and estimated that our population would ultimately reach about 60 million.

Well, that population figure has been revised again and again by different people. Some of you may remember a well known doctor who predicted a figure of about 200 million, just out of a blue sky, and there were others who were not even as competent as he who also made estimates.

But you cannot do that in this portion of the country. You cannot take the arable land alone as the basis of your estimate of population. You see that right there in Kitimat, in Yellowknife, in Keno Hill and Yukon. There you have mineral resources and population possibilities; and when you get mineral resources married to power development you have a productive machine there that will give you population, as it has done in Kitimat, in Yellowknife, in Keno; and it will do the same also in this area that we are speaking of

in northwestern British Columbia.

We are sometimes criticized on our population increase in the north country, comparing it with that which is going on today in Siberia. Well, I think there is an answer to that. I believe there are very good reasons why our population has not increased to the same extent as the population of Siberia.

First of all there is the political reason and political actions we could not possibly follow in this country in populating the north. Then there is possibly also a social reason; that the people of Russia or Siberia are not accustomed to the standard of living that we have reached in this country, and are content to live under the primitive conditions of the north country whereas our people take some time to become adjusted.

But there is also a geological reason which I do not think anybody ever really thinks about or knows about; in fact I did not know about it until quite recently. The geological reason is this, that both in Siberia and northern Canada we occupy approximately the same degrees of latitude, but there is a difference in the geological background, in that the last great geological event that happened on the earth, you might say, was the ice age.

During that ice age Canada was

covered almost completely with a great ice shield which had rolled the residual soils off the surface and carried them southward down into the United States, leaving us with clean bare rock, except for small patches of land where sedimentary basins were formed.

There were, however, one or two areas right here in Canada, in the Yukon, which were never covered by the continental ice shelf. There is quite a large area in Yukon territory right at Dawson which was never covered by the continental ice shelf; therefore we had the concentration of these great deposits in the Klondike. They were left there for centuries.

Siberia has very large areas of territory that were never covered by the continental ice shelf, and there you have residual soils where we have no soil at all. They are capable of supporting a population in those unglaciated regions, whereas we have nothing of that kind in Canada.

So you can make those answers to anybody who attempts to criticize us for not developing population in the north country as they have done in Siberia. There is a political reason, a social reason and a geological reason; and these are things, particularly the geological reason, we cannot overcome.

I think perhaps I had better just

end my brief right there, in view of the time, and thank you again for giving our group the chance to present this brief to you. However, if there is a question I can answer I will be glad to do it, as I am sure the other members of the party also will be.

THE CHAIRMAN: I am sure I speak for all the members of this commission in saying that not only are we delighted to have this brief submitted to us, but that I can think of nobody in this country we would sooner have appear before this commission than yourself.

MR. CAMSELL: Thank you very much.

MR. GUSHUE: I have just one question. On pages 13 and 14 of the brief there is this reference to fisheries:

"The Nass river is a fairly important salmon stream and fish propagation could be affected by the power development unless proper protective measures are adopted, such as fish ladders. The commercial catch of salmon and other fish in the Nass river area in 1954 was valued at \$700,000. Careful study of proven protective measures will be made by Northwest Power Industries to ensure that, if these dams are built on the Nass,

the fishing industry of the river will not be unduly harmed."

How high would the proposed dam be on the Nass river, and what steps would be taken to see that the spawning migration of salmon is not interfered with? Is that a question that could be answered now?

MR. WARDLE: From our present information the dam would not exceed 237 feet, which of course is a comparatively high dam. We will have to look very carefully into the possibilities of having the spawning salmon get around that by a fish ladder or some form of water shaft, and we will have the fish experts give us their opinion on that, because we are keenly aware that that is a very important thing.

MR. GUSHUE: The federal government have certain engineers who are concerned with that particularly, I believe; that is, the question of river protection.

MR. WARDLE: Yes; we have been in touch with those people. The dam we propose is higher than dams that have had successful fishways or fish ladders. But there are new methods in the offing, and we are going to look into those.

MR. GRAUER: Just to recapitulate the project in broad terms to see if we have it

right, you have the much larger Yukon proposal and then some 360 transmission miles away the Nass river development; but I gather that the Nass river development probably has a considerably better harbour at Alice Arm than the Yukon development has on the Taku river?

MR. WARDLE: That is correct.

MR. GRAUER: Therefore with the development of the Nass river, if industrial sites or proposed industries can better be located at Alice Arm, you would transmit the energy from the Yukon development to Alice Arm?

MR. WARDLE: We would do that to a certain extent, but not necessarily. We have in mind that our electro-metallurgical and electro-chemical plants will likely be on the Taku river. We have in mind all those deposits of minerals in the north; the iron in the tailings of the United Keno mines, and there are some copper deposits and we are keenly aware of what we hope will be the great stimulation of mining development in the Yukon and northern British Columbia when they have large blocks of power available.

MR. GRAUER: It would not be so feasible if they had to be taken in concentrates to Alice Arm?

MR. WARDLE: Well, that would add another 400 miles by water.

MR. GRAUER: Did I understand you

to say that the Taku could not be dredged?

MR. WARDLE: It could be dredged, but there is no guarantee that you could hold the canal. It is quite a rough stream which carries a fair amount of silt. We did think of a canal there off to one side near the foot of the mountain, but there is a hazard from that. If you had a tremendous runoff you could lose certain parts of it in 24 hours.

MR. GRAUER: Then do I understand you to say you would take the machinery and ore and that sort of thing in by barge?

MR. WARDLE: We can do that in the summer season on the Taku, for about 4 months. Barges of 125 ton capacity, with a draft of 4 feet 6 inches can go up a certain distance, and from there on we would have to build an access road.

I might explain that our industrial site is not on an all year round stream, as it is at Taku. We would have about 20 miles to go to deep water. We have gone into that very carefully, and there are two or three promising means of transportation. One, of course, is a highway, which we will build in any case. We have looked into what is called a monorail, which looks promising, and there is a railway. Some of the experts we have consulted are for standard gauge, and some for a narrow gauge. The trucking people have given us a very good estimate for

trucking over the 20 miles.

The deep water port will be in Alaska, over the boundary; and we seem to have great support there from Juneau and district, because they feel that their only chance of connecting with the Alaska highway is by going up the Taku past our power sites, up the Pike river and to Atlin. There is a road up there now from Atlin, and the Alaska road commission has gone so far as to do a lot of surveying, and they have surveyed a road from Juneau up to Taku and up about 30 miles to within 10 miles of the international boundary, and they have assured us in writing, which we never expected, that they would keep pace with our road construction on the Canadian side of the international boundary, which has been very encouraging and something we did not expect.

MR. GRAUER: Would most of your ore or concentrates come in overland or by sea?

MR. WARDLE: No, they would come in overland. They would come into our deep water port, where we would have mechanical loading facilities. Ore goes into the United States duty free. Our concentrates and processed ores could go out in bond if they were going to other Canadian ports, or they would pay duty going into the United States.

MR. GRAUER: In that general part of the world I have always understood that in

addition to your Yukon development and the Nass river development there is another possible or probable development, the Stikine-Dease lake complex of water. Have you ever looked into that?

MR. WARDLE: Yes, we have. We looked into that in 1953; diverting the Liard river into the Dease and then down the Stikine; but to get the Liard river water into the Dease you would have to have a 525 foot dam, which scared us off. There is a tremendous power potential in that area, but you have to spend a great amount of money before you get any horsepower, and then you have a long transmission line; and the Stikine river is no good as a port. The mouth of the Stikine is much worse than the mouth of the Taku. The Stikine has no possibilities of any kind of a port; in fact you would be about 35 miles in Alaska before you would have a deep water port.

MR. GRAUER: That possibility would not be affected one way or the other by either of these developments, would it?

MR. WARDLE: No, we do not interfere with that. We did think at one time of attempting to take that water down into the Nass, but when we got to the tremendous dams involved, based on the information we had we decided against it. I think some day that might be developed, unless power from atomic energy

gets into the picture.

MR. GRAUER: This vast amount of power which your proposal envisages, over 5 million horsepower, in terms of the mineral possibilities of the Yukon and northern British Columbia, would you say that is considerably more power than is needed for any foreseeable development in connection with minerals?

MR. WARDLE: Oh, yes, absolutely. There would be ore imported from all over the world for that. We have ample power for anything that will ever develop there in the way of mineral development in northern British Columbia and Yukon.

MR. GRAUER: You refer to that in general terms on page 2 of your brief. I believe you have a number of specific proposals for bringing ore in from other parts of the world and developing it at this point?

MR. WARDLE: And processing them. That is one of the ideas which the Ventures-Frobisher people had in mind, and I think that was probably one of the important things.

MR. GRAUER: I am not asking you for the details of those, but I have that understanding, that there are a number of specific proposals on which you are working, to bring ore in?

MR. WARDLE: That is right. Our first development would be about 50 miles below

Atlin, and Atlin is 110 miles from Whitehorse. That means a transmission line of 160 to 170 miles between our big plant and Whitehorse, and we would bring power up to Whitehorse and to Atlin. That is one of the first things we would do. We will likely need power there anyway to operate our Whitehorse dam, and eventually to operate the dams for the upper and lower reservoirs.

MR. GRAUER: On page 5 you refer to the forest resources:

"In addition there are the potential resources of forest cover with ample power to operate pulp and paper mills."

Have the forest resources of that area been sufficiently explored to enable you to say whether that would be a substantial utilization? Would there be several pulp and paper mills, or is it rather limited?

MR. WARDLE: The forestry branch of the federal government have been working for two years on a forest inventory of the Yukon. They took it over as an exercise, and they have found quite promising stands of timber, but so far they have not gone on record as to just how much they think there would be available for pulp and paper, or for lumber production. There would be some; and peculiarly enough, a

lot of it lies north of Whitehorse along the Teslin river. Some of the best stands are there. They have been classifying all that forest cover there for over two years.

MR. GRAUER: What is the forest cover like in British Columbia? Are you on the wrong side of the mountains there?

MR. WARDLE: The forest cover where our transmission line goes is not thick or heavy. It is fairly open, and in some parts it is a little too open, so much so that we have swung a little further east to get shelter in some areas. But along Alice Arm there are some very fine stands of timber. There are a lot of timber limits there; some may have been cancelled, but Alice Arm has very fine timber around it. Ample construction timber is there.

MR. GRAUER: Thank you very much.

MR. STEWART: I understand that in the investigation of the Yukon-Taku project, your feeling is that there will be difficulties and delays in developing this project because of international obligations and so on. Do you care to make any comment on the nature of those difficulties and delays?

MR. TOLMIE: I think we would prefer not to comment on those. They are matters beyond our control, but they are quite apparent to the investing public, shall I say. They pose a warning sign, so that we cannot contemplate as

early development there as we can in the Nass project, where we are not affected by such problems. So the first stage of development is the Nass river.

MR. STEWART: You refer to that as an interim development; I think you use that term somewhere. Would it be reasonable to suppose that these other factors operating in the development of the Nass river project would delay the other project? Would that in itself be a factor in delay?

MR. WARDLE: I would say no to that. We hope by the time we get anywhere near the capacity of the Nass river project, these other difficulties will have been resolved.

MR. STEWART: What period of time had you in mind there?

MR. WARDLE: Well, some people have suggested 5 years and some 8 years. I have no idea, actually.

MR. STEWART: We had a recommendation from the Whitehorse board of trade, which you may have seen, and Dr. Camsell referred to the Yukon brief and to the brief of the Northwest Territories. This recommendation takes a significantly different approach to yours. Have you seen theirs?

MR. WARDLE: I saw one which they issued and sent around in July, but they have recalled that and I understood they were going to write another one. In that one they mentioned the

original Alcoa project.

MR. STEWART: Do you wish to comment on why they would urge that?

MR. WARDLE: Alcoa?

MR. STEWART: Yes?

MR. WARDLE: Well, Alcoa was in there in 1947, I think. They were enthusiastic and ready to begin construction, they said, before they had any surveys of any kind. Of course they were not in a position to do that, but they were in Whitehorse and they made quite an impression on the Whitehorse people.

We are convinced that we have a better power project, when you get right down to it. We have a larger capacity, though we are only planning for about a million and a half kilowatts. We can get waters to the south that we can collect, and they did not have the idea that they could do that.

Then all their development was in the United States. Even their first power plant was over the boundary in Alaska, and the lower one was also there. It is simply that if Alcoa built it and developed the power, they were in the driver's seat. If we in Canada develop the power, we are in the driver's seat.

MR. STEWART: Is there any prospect of power from these developments being used in the Yukon?

MR. WARDLE: Oh, yes, anywhere within transmitting distance. It is just a matter of transmitting it.

MR. STEWART: So some of the power could be used in the Yukon?

MR. WARDLE: Yes, we have unlimited power for the Yukon.

THE CHAIRMAN: Well, thank you very much, Mr. Tolmie and gentlemen. We are sorry we kept you so late, but we were very interested in what you had to say. We will adjourn now.

---At 5:45 p.m. the
commission adjourned.

ROYAL COMMISSION
ON
CANADA'S ECONOMIC PROSPECTS

HEARINGS

HELD AT

VANCOUVER, BRITISH COLUMBIA NOVEMBER 30, 1955

VOLUME 15

Wednesday, November 30, 1956.

Vancouver, British Columbia

The commission resumed its
British Columbia sittings in Salon
"N", Hotel Vancouver, on Wednesday,
November 30, 1955, at 9 a.m.

Present:

Mr. W.L. Gordon, Chairman;
Mr. Omer Lussier;
Mr. A.E. Grauer;
Mr. Andrew Stewart;
Mr. Raymond Gushue.

Appearances:

Mr. J.F. Hume, mayor;
Mr. Gerald Sutton-Brown, director
of planning;
Mr. Frank Jones, comptroller;
Mr. John Oliver, city engineer;
for the city of Vancouver.

Mr. R. Mahoney, of Management
Research;
Mr. H.V. Whittall, Consolidated Red
Shingle Cedar association;
Mr. J.S. Johanson, Plywood
Manufacturers' association;
Mr. H.H. McDiarmid, Interior Lumber
Manufacturers' association;

Appearances, cont'd.

- Mr. H.G. McQuillan, Truck Loggers' Association;
- Mr. J.A. Young, Canadian Pulp and Paper Association;
- Mr. O.B. Hollies, B.C. Loggers Association;
- Mr. L.L. Bentley,
- Mr. G.L. Draeske, B.C. Lumber Manufacturers' Association; for the forest industries of British Columbia.
- Mr. P.R.U. Stratton; for the Vancouver Housing Association.
- Mr. B. Patterson, planning officer; for the Municipal District of West Vancouver.
- Mr. W. Lane; for the British Columbia division, Community Planning Association of Canada.
- Mr. G.F. Farry;
- Mr. John Oliver, city engineer; for the Metropolitan Highway Planning Committee.
- Mr. J.D. Ovans, general secretary;
- Mr. I.D. Boyd, for the British Columbia Teachers' Federation.
- Mr. E.J. Irwin, president; for the British Columbia Automobile Association.
- Mr. G.F. Rogers, managing director; for the Yukon & White Pass Corp., Ltd.
- Mr. G.F. Edwards, president, Senior Citizens' Association of British Columbia.
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THE CHAIRMAN: Well, gentlemen, shall we come to order? Your Worship, we are very pleased to be back in Vancouver. It seems a little quiet here after last week end, but it is very pleasant just the same.

Would you care to begin the proceedings this morning?

MR. HUME: Yes, I would. Mr. Chairman and members of the royal commission on economics, we are very pleased to have you in Vancouver this morning. We are sorry the weather is not so good, but you can expect a few days of rain in the month of November. Usually December and from then on are beautiful months.

I think everybody in Canada appreciates the time and energy which you are giving to the people of Canada in order that you may bring in a report in connection with the economics of Canada. We are delighted to help in any way we can. We have submitted a brief for your consideration, and it may be that some of you have had time to look at it and read it.

However, we have with us this morning our leading officials. We have Mr. Sutton-Brown, whom you have met; we have Mr. J.C. Oliver, our chief engineer, and we have Mr. Frank Jones, our city comptroller, as well as our corporation counsel and myself. We are going to ask Mr. Brown if he will submit the brief, or if you will discuss the brief with him on behalf of the

city.

Again let me say how much the people of Canada appreciate your efforts and the time and energy being devoted in their behalf. We are very honoured and pleased that our own Dr. Grauer should be a member of this commission. Thank you, Mr. Chairman.

THE CHAIRMAN: Thank you very much.

MR. BROWN: May I sit for this?

THE CHAIRMAN: Yes, certainly.
We will mark your brief Exhibit 79.

MR. BROWN: Mr. Chairman and gentlemen, I am in some difficulty this morning. I believe most of you have read the brief, but I have been asked to highlight some of its sections, and it has occurred to me that all of you may not know the metropolitan area of Vancouver, so I have brought a map on the right and an aerial photograph on the left so you will know the areas we are talking about.

The city of Vancouver itself is the central section. The metropolitan area which is referred to in this brief comprises the north shore municipalities and then the municipalities of the peninsula going right back to the river, including New Westminster, and then right across the north arm of the Fraser plus Richmond, which is the area I am now indicating, and we have included as part of the census area the section

of Surrey facing New Westminster, although we do say that probably in the future we should think of the metropolitan area in terms of the whole area which goes almost to the border.

So that in brief are the two sections we refer to; and we say in the introduction to the brief that we are dealing with the anticipated growth of population; the industries and services which will be required to support that population; their land requirements, and then the estimate of the city's expenditures required to support that development.

We mention two main conclusions that we reach in this brief; first of all the difficulty of divorcing the city of Vancouver from the metropolitan area in considering any of these things; and second, the obvious fact that the resources of the city in finances and land will be insufficient to meet its needs.

That is the first page. Coming then to take it section by section, the first section we deal with on page 2 is population, and we indicate that there have been various projections in recent years giving an approximate range of between 450,000 and 500,000 for the city of Vancouver. The sources of these estimates are quoted, and we suggest in the brief that we ought to consider a population range of 500,000 to 550,000 by the year 1980; and referring to table 2 on page 3, we give the

1980 breakdown in estimates as between British Columbia, metropolitan Vancouver and the city of Vancouver.

One point we perhaps bring out in connection with the metropolitan population given in table 2 is that consistently the metropolitan area has included 48 per cent of British Columbia's population, and that has been so since 1931.

The basis of the city's estimates are given in some detail in the appendix, and I will not refer to those but I would like to bring to your attention a point which is not given in the brief. That is, Vancouver's anticipated increase from 1955 to 1980 is worked out at 155,000 people, which represents an increase of 40 per cent. The increase, however, for the remainder of the metropolitan area, excluding Vancouver, is 550,000, or an increase of 200 per cent. In other words the major increases in population for metropolitan Vancouver must come outside the city according to our forecast, which perhaps underlines the point I made earlier.

The next section on page 4 discusses the labour force, and it says in the third paragraph:

"Assuming, however, for the purpose of this brief, that the percentage of the total population

employed in the future remains at about 40 per cent for the metropolitan area, this will give a total labour force of 490,000 to 570,000, or an increase of 276,000 to 356,000 over 1951."

In other words we shall have to find in the metropolitan area from 276,000 to 356,000 new jobs in order to maintain our metropolitan population growth. The brief implies that in order to bring that about we must depend largely upon considerable increases in our manufacturing industries, and it points out at the bottom of page 4 that although the proportion employed in manufacturing is not far below the proportion for the country as a whole, it is definitely low as compared with our present leading industrial metropolitan areas.

This is indicated in table 4 on page 7, which shows the percentage of the labour force in manufacturing in our main industrial areas, including Hamilton, Windsor, Montreal, Toronto, Winnipeg and then Vancouver. We stress in the brief our present major dependence on one manufacturing group, namely wood and paper products, which provide 38.46 per cent of our manufacturing employment at the present time. The importance of this industrial picture appears perhaps later, but it is an essential

background to an understanding of the brief, I think.

We can then move to page 9, where we come to discuss our future land requirements to support this population growth and the necessary new jobs and other facilities we shall have to find for it. We indicate under the section headed "Housing" on page 9 -- which incidentally is more related to land availability and redevelopment than just an outright calculation of our housing needs -- that a total gross area of 1,900 acres of predominantly residential land has been identified for urban renewal or redevelopment, or whatever phrase you care to use for it, in the next 25 years, of which it is considered that 550 acres might need to be acquired and replanned by the city. Of that 550 acres, 450 are likely to be most suitable for residential development, and the remainder for commercial and other uses.

Of that section of 1,350 acres which we think will be redeveloped by private enterprise, 1,200 acres is considered most suitable for residential uses and 150 acres for commercial and other uses. Those figures, incidentally, include streets and lanes.

Dealing next with the larger vacant areas which remain in the city, we find that we have only 2,650 acres left, of which 1,600 acres is potential residential land, including local

shopping centres. Of the remainder, 600 acres is most suitable for industry. Those figures in effect represent, as far as the city is concerned, our potential development areas of the next 25 years.

Coming next to recreation, we suggest on page 10 that our present acreage for parks and so on is 2,677, which gives a not unreasonable standard of 7 acres per thousand of the population; and we shall require to meet our anticipated population growth an additional 800 to 1,200 acres, whereas we can only find, we think, 450 acres in the city. So we have a deficit of recreational space amounting to 350 to 750 acres, and we shall have to look to the metropolitan area if there is any intent to find that deficiency. We do not anticipate any problem in finding land for our new schools, but we do point out our present low standard, particularly in the existing old schools.

We think we can satisfy our needs for commercial development, both in the downtown area and in the suburban areas, and we come next to the industry where our main problems lie. At the bottom of page 10 we point out that in the metropolitan area, as distinct from the city, we have at present 6,700 acres of land used by industry. Of that total, only 1,900 acres are in the city of Vancouver itself, or less than

one-third. We have estimated -- and it is not easy -- the industrial acreage we shall require to support this metropolitan population growth which we anticipate, and we estimate that we shall require 16,000 to 18,000 acres of developed land for industry in the next 25 years, up to the year 1980, or an additional 9,000 to 11,000 acres of developed land.

Of this total need of 9,000 to 11,000 acres, the city potential for industrial development is only 800 acres, so the remainder would have to be found in the rest of the metropolitan area.

The significance of that perhaps can be gained in the knowledge that the Duke of Westminster's estate's development on Annacis island is, I believe, in the neighbourhood of 1,000 acres; so we would need something of the order of eight times that to maintain our population growth, a growth which, incidentally, has been based to quite a degree on past trends.

So the city of Vancouver, presently containing 60 per cent of the population, has only 28 per cent of the industrial land; and if our projections are right, we shall have 40 per cent of the population with only 15 to 17 per cent of the industrial land. The problem of organizing that industrial development and providing services is, I think, very self evident.

Then on page 12 we discuss the estimated capital works and their cost to meet the needs of the city during the next 25 years, and those are detailed to some extent in table 6 on page 16. You will note that those estimates are divided into 5 year periods, and they are divided according to the several departments, boards and so on of the city. The total of those estimates amounts to \$301 million.

At the bottom of page 12 we mention two major difficulties we find in giving you these estimates. The first is the difficulty of appraising our future needs with any degree of accuracy; and we do not mean there just the plain difficulty of crystal gazing, but rather perhaps the changes of policy which might come in the future. That is particularly underlined, I think, in the section on health and social services, which is given as a separate appendix B and which I think we recommend to your notice,

The second question which comes up involves the whole problem of city finance and the share which will have to be borne by a city, much of whose services are shared by the metropolitan area or even by a wider population. We have estimated, for example, that the expenditure on those sections of major highways which fall within the city but which will be required for traffic originating outside the city will amount alone to \$55 million. In

other words it is evident from this that we are bearing a burden arising from activities and developments outside our boundaries. The brief also mentions the future of the airport, for which we have included no estimate because of the lack of knowledge of what will happen there in future.

The next pages are taken up by supplementary notes on the estimates, which I do not think I need give to you, and we come next, therefore, to page 17, which discusses the financial consequences of this expanding population in relation to Vancouver.

To begin with, we have a brief survey of the revenue position, and we indicate that on a constant dollar basis -- this is in the first paragraph -- the per capita cost of running the city has dropped from \$46.20 to \$43.90, from which we draw the conclusion that those figures would seem to point to the fact that the additional civic revenues derived through the growth of the city have kept pace with the additional operating costs arising out of such growth. And I think also, Your Worship, while we do not say so, we can take some credit to ourselves for the efficient running of the city.

THE CHAIRMAN: Certainly when I read this I drew that inference.

MR. BROWN: We do indicate that while this position might on the face of it seem to be

satisfactory, there are certain additional points, which we mention, indicating that increased capital expenditures on municipal projects to meet the needs of a growing city, and the additional carrying charges on the debt created and the cost of operating and maintaining those projects could very quickly change that picture.

We then discuss in the third paragraph -- and, Mr. Chairman, I am taking this a little more verbatim than the rest of it, because it is probably the most important part -- that during the 10 years since world war II, Vancouver was able to finance a capital programme totalling over ~~\$75 million~~ or an average of \$7.5 million a year. However, if we cast back a further 15 years, making a total of 25 years in all, we get an average of less than \$4 million per year. It is true that the purchasing value of the dollar has its influence on that figure; nevertheless it does show that in 1945 we had a tremendous backlog of work with which we do not think we have yet caught up.

Looking to the future, we estimate that we require capital expenditures estimated at \$300 million. We estimate that if our growth continues as it has been going, and there is a consequent increase in assessment values, we will be able to support a capital

expenditure programme amounting to \$187.5 million. That is obviously far short of the estimated requirement of \$300 million.

We say that private investment and expansion are dependent to a large extent on the services supplied by the municipality; but experience has shown that public investment continually lags behind private investment. The financial resources of the municipalities are not adequate to provide all the services needed, and it is quite apparent that unless means are found to enable the municipalities to meet their responsibility in this regard, the provision of these services will continue to fall farther and farther behind private investment.

Then on page 18 we state:

"It is suggested that some plan should be worked out to assist the municipalities in securing lower interest rates, and so enable them to carry out a programme of capital works which would keep pace with their growth and provide the amenities found necessary in our modern way of life. It is also suggested that larger federal and provincial grants should be made available towards the cost of construction

and maintenance of roads and highways in the large urban areas, for the provision of facilities such as acute and chronic hospitals, and for the clearance and rehabilitation of areas other than residential districts."

At the moment, under the housing act, grants are available only for the clearance of residential areas. We believe that should be extended to other types of areas.

"It would be desirable that these grants become part of the financial policy of the governments and that they be so established that the cities and municipalities would have reasonable assurance that they would be forthcoming from year to year.

The future economic health of Canada as a whole depends to a very large extent on the normal growth and financial stability of its cities and towns."

In conclusion, Mr. Chairman, we indicate that severing Vancouver from the rest of the metropolitan area in any report of this character, and dividing the city's problems into

their several bits, disguises the fact, perhaps, that as far as economic and social welfare is concerned, we should look upon this problem as one metropolitan problem; and in fact the problem of this metropolitan area may be characteristic of the metropolitan problems across the country. If that be so, then this brief perhaps gains a certain added significance.

If we are correct in our surmise we suggest in the last three paragraphs:

"If these trends are established, it would seem that Vancouver's future, and perhaps that of similar metropolitan masses, are dependent on new concepts. The greatest dividend for the future may not lie predominantly in opening up new country, but in developing the efficiency and effectiveness of the urban areas and their people. It may be necessary for the economic benefit of the country to develop the idea of 'public investment' in the metropolitan areas; this would be a true concept of investment in that it would yield a large dividend in increased production and wealth.

With such a wider perspective, this brief may gain an added significance. Its several elements lead to the requirements in planning and developments of a composite metropolitan entity. This much greater issue in the national economy would suggest the need for a policy of urban public investment by federal, provincial, and civic agencies. Grants and other financial aid would then form part of a policy of stimulation and inducement to regulated development based on or dependent on metropolitan or municipal programmes and not on haphazard and intermittent efforts to improvement.

In order to aid such a policy of urban public investment, economic co-ordinating agencies might be established at provincial and federal levels to promote the development of natural resources and manufacturing. Such agencies would seek to define more precisely the role to be played by the several urban centres."

I think, Mr. Chairman, that concludes the main points of our brief, and represents the thinking of the Vancouver city council.

MR. HUME: May I suggest for your consideration, Mr. Chairman, that Vancouver is just 69 years of age, the youngest city in the province of British Columbia. As you know, the growth has been very rapid.

Last year, for instance, we finished paying for a \$16.5 million bridge. The entire cost was borne by the city of Vancouver. Last year we spent \$10.5 million on schools. We spent about \$12 million on hospitals; and by the way, gentlemen, out here certain hospitals specialize in certain things, and consequently draw patients from all parts of British Columbia.

Then, being a growing city, we spent millions of dollars on new roads, street lighting, sewers, etc.; but will you please keep in mind that we are a young city, 69 years of age, compared with some cities 200 years old. From that you can see the rapid growth we expect to have in the next few years to come.

THE CHAIRMAN: Thank you, your worship. I do congratulate you and Mr. Brown on this very excellent brief and the thinking that has gone into it, or which preceded it. I think you touch on many of the vital questions which somehow or other have to be resolved.

I was glad to see that you emphasized the fact that the problem is a metropolitan one, and not a problem that can be solved by the city of Vancouver alone. That has been the experience elsewhere, and I expect that this situation will be recognized more widely as time goes on.

I would like to inquire whether there has been any move as yet to create some form of metropolitan authority here, with all the difficulties which that implies including uniform assessments and other things that some people shake their heads about a little when the time comes. Have you got anywhere so far?

MR. HUME: We have now a metropolitan water board, which is working very satisfactorily, and we have a sewer board. We have been negotiating for a health board, but so far we have just got on with the sewers and the water. We are also very interested in a metropolitan fire department.

MR. JONES: I think we should mention that we have the provincial equalization of assessment act.

THE CHAIRMAN: So that is not an obstacle?

MR. JONES: No, it should not be.

THE CHAIRMAN: It is an obstacle that is very real in some places.

On page 5, when you were discussing

the implications of this greatly increased population and the fact that there would need to be jobs found for the increased number of people of working age, you stressed the fact that you would expect an increase in manufacturing. But on that page you end up, as I have interpreted it, by suggesting that this increase might be centred to a considerable extent in the chemical industries which, as we know, as a group do not employ very many people.

What other forms of manufacturing do you think might be developed here, apart from the industries that are processing wood products?

MR. BROWN: As you will know, before one can really assess that point one should carry out a fairly detailed study of industrial conditions, which we have not yet done. There has been some talk of it. I know the metropolitan industrial commission say such a study ought to be undertaken, and I think it would be a good thing if it were undertaken, because one has to assess the types of industry for which conditions in British Columbia are most appropriate. Up to the moment nobody has done that, so I do not think we can answer that question.

THE CHAIRMAN: Very well. Then in discussing your estimated capital requirements over the next 25 years, you include some references at the bottom of page 12 to some items as to which you were not sure as yet who

would be responsible for; a new airport terminal, a secondary airport for private flyers, and a heliport.

MR. HUME: As to that secondary airport, we had a meeting recently about that, and I think it will be the full responsibility of the Department of Transport.

As far as the present airport is concerned, that is owned and operated by the city. Certain negotiations are being carried on now in connection with it.

THE CHAIRMAN: I take it you would hope one way or another the city would not be responsible for these three?

MR. HUME: No, sir. It is an international airport, and we think it should be dealt with by the dominion government along these lines.

THE CHAIRMAN: Then on page 18, when you were discussing the assistance which these municipalities will require, and you refer to lower interest rates, to assist toward the cost of construction and maintenance of roads and highways, the provision of facilities such as acute and chronic hospitals, and to the clearance and rehabilitation of areas other than residential.

We have received some suggestions as to how this assistance might be made available. In some cases the suggestions were that additional

revenues be provided to the municipalities, and in other cases that responsibility for certain functions be assumed by the provincial government, and in still other cases a combination of the two.

What are your own views about how these various matters should be dealt with?

MR. HUME: We think the running of the schools should be the responsibility of the provincial government. Second, we think the hospitals should be the responsibility of the provincial government. Those are two major things that cost a lot of money.

THE CHAIRMAN: I have heard the suggestion about the hospitals before, but in your case you think the schools should also be the responsibility of the province?

MR. HUME: Yes.

MR. GRAUER: Does that include the administration of the schools?

MR. HUME: Yes, the administration as well.

MR. GRAUER: The whole thing?

MR. HUME: Yes.

THE CHAIRMAN: In other places it has been suggested that if the municipalities were permitted to tax the properties that are now tax free, with the exception of churches, they would be in a much better position to handle the responsibilities which they have for some of those expenditures.

MR. HUME: Yes, sir. We feel that we have only one means of taxation, and that is putting it on the land, whereas the provincial government have many ways of raising money, and so has the dominion government. Our only source of revenue is from land. Consequently when we raise the tax rate or increase the assessment it works a hardship on a lot of people.

THE CHAIRMAN: Have you any idea of the additional revenues you might obtain if you were able to tax federal and provincial properties and other tax free properties within your city?

MR. HUME: That amount would be substantial.

MR. JONES: It would run into several million dollars. That is what you had in mind, dominion and provincial properties, when you refer to other properties which are not now taxable?

THE CHAIRMAN: I was sort of scurrying around to hear what you had in mind.

MR. JONES: When you say properties other than churches, I do not think there is very much else when you take out the churches. Dominion and provincial properties would make up the balance.

THE CHAIRMAN: You have not that figure?

MR. JONES: No, but I can get it.

MR. HUME: Last year the dominion government built us a very fine customs building. We are very proud of it, but we lost half a block of land that we now cannot tax. We have under construction a very fine post office, and it is very badly needed. It is a building that is supposed to be the best post office in Canada, but now we lose a block of land we cannot tax.

What if the dominion government keeps building buildings? We are going to lose blocks of land and it is going to amount to a substantial sum of money.

MR. GUSHUE: Do you get compensatory grants in lieu of taxation from the federal government?

MR. JONES: This is the first year we have been able to qualify, and we have our application in now. We expect to get about \$130,000. This is the first year we have been able to qualify under the change in the act.

MR. GRAUER: It was suggested in Victoria that if the city could tax the property owned by the senior governments, that would pretty well solve their future financial problems.

MR. JONES: It would go a long way toward it, I am sure.

MR. GRAUER: In Vancouver too?

MR. JONES: Yes.

MR. HUME: Could we present Mr. Oliver, our chief engineer, to deal with highways?

MR. OLIVER: On the question of highway grants we are, I think, in a rather unique and unfortunate position in this province. The provincial government pays nothing, with one minor exception, toward the cost of construction of highways through cities of over 15,000 population. There are only two areas in British Columbia which fall into that exact category, Vancouver and New Westminster. In other places the whole cost of arterial highways through the organized territory is borne by the province.

THE CHAIRMAN: What about the other provinces?

MR. OLIVER: I do not know, I am speaking of British Columbia now. There are different arrangements in other provinces. We are facing, as you will see, very heavy expenditures in Vancouver on highways which are required primarily to connect to provincial highways, and we feel that in that case there should be a grant toward the cost of capital construction of highways.

The maintenance is not very serious, and I think the municipalities could absorb that. We do believe, however, there should be that grant toward the cost of certain specified highways. So far we have not been able to work out an arrangement of any sort with the provincial government. That would

go a long way toward meeting our future very heavy anticipated costs.

THE CHAIRMAN: What is the practice in other provinces in similar circumstances, in the large cities?

MR. OLIVER: There are different arrangements. In metropolitan Toronto, for example, there are quite extensive provincial grants. I do not know the situation in Quebec. On the prairies there are grants given on varying scales; there is no pattern of any sort.

We have no formula to suggest, but we do suggest that there should be at least a meeting to work out some arrangement. I imagine that the provincial answer to that will be that they may consider it if and when the federal government contributes to highways more along the line of the United States pattern, rather than confining their contribution to one trans-Canada highway as is the case at present.

THE CHAIRMAN: Perhaps you would rather have it settled that one or the other authority would be responsible?

MR. OLIVER: Our view as a municipality, of course, is that we as the creature of the province look to the province, and what arrangement they make with the dominion government is their own affair. But we think there will have to be some contribution, preferably in the form of a capital grant, toward

the cost of these highways. In the metropolitan area the provincial government is already responsible for a fair mileage of highways in other municipalities, and no one can really tell the difference between one municipality and the other. It is just the matter of a name.

MR. GRAUER: As to the proportion of metropolitan Vancouver to the provincial population, that is 48 per cent, we have had an estimate which is considerably higher than yours for the projection of the population of British Columbia. If that were to turn out to be true this proportion would probably still work out, would it? Any higher provincial total would herald a higher metropolitan total?

MR. BROWN: We think so. That figure has been so remarkably consistent since 1931 in every census, and according to more recent estimates it seems to be continuing. In other words there is no change in that trend; there is no sign that it is going up or down, and as we do say in this brief, it looks as if our competitive position is likely to remain unchanged. We do not see any signs of a competitive Vancouver and its adjacent municipalities in the British Columbia set up.

MR. GRAUER: Then with the relatively restricted area you have for expansion, both industrial and residential --

there is room, of course, outside the city's boundaries -- we would gather that the city would probably start going up into the air fairly quickly. Is that a fair deduction?

MR. BROWN: I would not like to say that that is a fair deduction. I think it is true to say that throughout the west on the American continent there is a feeling that they would sooner have their own homes, separate homes, and that is true right down through the United States also. There is a very distinct difference between the forms of development, as you will know, in the east and the west.

So although our proportion living in apartments is likely to increase, I do not think that increase will be such that we will get a predominant apartment population. I think we will tend to spread out.

MR. GRAUER: Table 4 on page 7 deals with the proportion of the labour force employed in manufacturing industry in manufacturing areas, and as you point out, in Vancouver it is considerably lower than in eastern centres, at 25.1 per cent. Does that 25.1 per cent represent an upward trend, do you happen to know?

MR. BROWN: I think it is an upward trend, because it is upward right across Canada; but it is not relatively upward.

MR. GRAUER: The others are going up too?

MR. BROWN: Yes.

MR. GRAUER: What steps are being taken in the metropolitan area, where most of the industrial development, I gather, will have to take place, to zone areas for industrial development?

MR. BROWN: I will have to give you a personal assessment of the problem. It is not only a question of zoning, we feel. If we are to obtain industrial development in this competitive world -- because everybody is competing for industry -- we are going to have to provide the facilities.

In the case of the city of Vancouver, we are ourselves reasonably large land owners, and the city is putting on industrial subdivisions. There is one instance on the Grand View highway, where we recently marketed about 35 acres. We are processing two more on Marine Drive, where the land is all privately owned, and the city agreed to set aside half a million dollars for drainage to make the land available for industry. But there is no sign, as far as I am aware, outside the city of Vancouver of what are known as industrial estates or industrial districts, as they are called in the United States, where all the facilities are made available for areas of industrial development, which is to such a degree an answer to this problem as found in other places.

For instance, we know that the waste products of one industry comprise the raw materials of another. So if you get this grouping of industries it is to the advantage of industry. They have everything laid on for them, and that is a goal, I believe, which we should seek. But the point is that it is outside the jurisdiction of the city of Vancouver to do this sort of thing, and the only great aid we are getting is of course Annacis island, where the Grosvenor Estates are doing precisely what I have been saying for about 1,000 acres. We shall need a lot more than that to meet our requirements for the next 25 years.

MR. GRAUER: I suppose if that is a success it might very well stimulate other similar developments?

MR. BROWN: I would hope so.

MR. GRAUER: On pages 18 and 19 it is suggested that the remedy for financial problems might be grants from the senior governments of low interest rate loans.

One of the problems there, as you are no doubt aware, is the question of keeping the economy on an even keel; that is, straightening out the tendencies toward inflation and depression. In that connection the assumption, and it is implicit here, is that we are going to have a constantly expanding economy, which assumes that the senior government,

the federal government, with its control of money and credit, will be able to use the devices we are aware of and which we hope will keep things on an even keel.

A great deal of that is related to the changing of the interest rate. If you have built in low interest rates for any considerable segment of the economy -- and the municipal segment is a considerable one -- all across the country, and you get this big projected expansion, it makes it difficult to keep the economy on an even keel.

As you know, Mr. Butler in Great Britain paid attention to that problem when he introduced his special budget and said they had no control over municipal expenditures.

That is a problem, and I am particularly interested in the suggestion on page 19. I do not know whether you intended it to deal with that problem, but it seemed to me it might be a possible way out as far as metropolitan areas are concerned, the idea of public investment in a metropolitan area in which the federal government would have a very prominent role, I gather. If that were true that public investment idea could be perhaps attuned to the need for straightening out the ups and downs. Was that part of your idea?

MR. BROWN: That was part of the idea. Of course, as you know, in Great Britain

all the municipalities get their money from the federal government.

MR. GRAUER: Yes, but the federal government has great difficulty in telling them to chop off their public expenditures. The central government in Great Britain is able to say, "We will stop work on our embassy in Washington" and so forth, but they are not able to tell the municipal governments, I rather gather from Mr. Butler's remarks, that they have to stop their projects.

MR. BROWN: They were very successful in the post-war years in stopping it, or channeling it along certain lines. I think Mr. Butler was being a little hard on the municipalities. I believe he can put on the screws if he wishes, though of course I am only guessing. Perhaps Mr. Jones would like to say something on this.

There is another implication here, in a way. You know the tremendous success of the housing programme since the last housing act, whereby certain things were done by the federal government which brought about a tremendous inducement to build new housing. But there is a forgetfulness of all the other things that go with houses, so you get this tremendous surge of housebuilding, leaving municipalities away behind in all the services they have to provide, with no similar inducement for them to

keep up with this programme. It is a little one-sided at the moment, and that is why we have used this public investment term as really a thought-out programme as distinct from the odd bonus to the municipalities from time to time.

MR. JONES: We are not suggesting unlimited low interest money; we are suggesting low interest rates. I am thinking of the situation in Alberta, where they are able to borrow money at $2\frac{1}{2}$ per cent. But I agree definitely there should be some control over it to prevent inflation.

MR. GRAUER: In Canada you do have the federal system which they do not have in Great Britain, so the municipalities do not come under the federal government here. The further difficulty is that the country is so widespread, and certain provinces are, for various reasons, so jealous of their own rights that there is a very considerable objection from both directions to the federal government taking any very detailed position in the administration of these various functions which are now within the municipal and therefore the provincial orbit. That is a problem I am sure you have in mind.

MR. BROWN: I was not suggesting that we do exactly the same thing as Britain, of course. We are aware of this provincial-federal position. I think Mr. Jones has really hit the point. There is really one point in

connection with this. As I understand it, metropolitan Toronto is now borrowing money at a cheaper rate than the individual municipalities were able to borrow.

MR. JONES: That is right.

MR. STEWART: Mr. Mayor, you suggested that education might be taken over, financed and administered, by the province. Apart from the financial relief to the municipality, what gains would you expect from that change?

MR. HUME: As you know, our population is increasing very rapidly, and every year we have to build new schools which have to be paid for. As I said before, the only way we have of raising money is by taxing land, whereas the provincial government has different kinds of taxes, different ways of raising taxes that we do not have.

As our city grows, our school population will grow. As I said, there was \$10 million spent last year on schools. There is more money to be spent this year; and between the hospitals and the schools, which cost so much money, it is pretty nearly impossible for us to get along year by year without raising the tax rate, and most of that is due to the hospitals and schools.

It is quite true that the provincial government has made substantial grants,

but people are coming from all over British Columbia to our hospitals, and consequently we have to enlarge and enlarge and enlarge; and the same thing applies to our schools. If we could get rid of the schools and the hospitals we could get along fine and not increase the tax rate very much.

MR. STEWART: But it seems to me your argument is wholly a financial one. You just wish to be relieved of the cost?

MR. HUME: Oh, no. There is an acute hospital going up now, well under way, costing \$10 million. It did not cost us that much, but it cost us our percentage of the \$10 million. We should start another chronic hospital costing another \$15 million. These people going into the chronic hospitals are not all Vancouver people; they are from all parts of the province. We think it should be recognized as a provincial hospital, whether it be St. Paul's hospital or Vancouver General or any other.

We are not trying to discourage people from coming to the Vancouver hospitals, but we have some outstanding specialists in the different hospitals in Vancouver and people come from all over the province to our hospitals. When that happens these other municipalities do not have to build the hospitals, but we have to build more hospital accommodation in order to meet the increased demand not only of our own

population but of the population of the province of British Columbia.

MR. STEWART: That factor is not present in the case of schools to any appreciable extent?

MR. HUME: Not the same as hospitals.

MR. STEWART: Then the argument in regard to schools is purely financial?

MR. HUME: It is purely financial; but being such a rapidly growing city, something should be done to help us with the school problem.

MR. STEWART: I suggest very serious difficulties would arise from the administrative point of view. I presume if the provincial government were responsible for schools in the city of Vancouver, they would have to be responsible for the schools in all the municipalities.

MR. HUME: I think that would be the case in all municipalities. That is my personal opinion. If the government took over everything in connection with the running and building of schools, that would be the hope of the municipalities.

MR. STEWART: I would suspect that if that happened the provincial government, being equally concerned about the schools in all municipalities, would attempt to move in the direction of the equalization of the facilities

of schools and the opportunities for schooling in various municipalities, rural and urban; and I am rather inclined to suspect that under those conditions you would find you would not get as good schools as you do when you look after them yourselves.

MR. HUME: I do not know about that. I am not criticizing the provincial government in any way, because they have tried to be generous, and we do not want to spoil the relationship we have with them. But I think the government could run them just as well as we could, if they took them over and paid the expenses and did everything in connection with the schools.

MR. STEWART: I am just not sure they would run them as you would like to have them run.

MR. HUME: Well, I am going to try to submit something a little different. For many years we have been trying to sell our airport. The government always said, "You can run an airport and are running that airport better than we could run it." We have not sold our airport, but we now want to sell it for a substantial amount because it is a going concern right now. But we should not be in the airport business, because it is an international airport the same as other international airports across Canada. But they have always said, "You can run it better than we can." Perhaps

we can, but we would like to give the government a trial to see what they can do.

MR. STEWART: Children are not international children, though.

MR. GUSHUE: How does the equalization of municipal assessments work out in British Columbia? I am not too familiar with that.

MR. JONES: Under the act, Mr. Chairman, there is a provincial assessor, and all the assessors in all the municipalities must submit their rolls to him at the end of the year, and he has the final say as to what the assessment shall be. He has his own group of assessors who make these checks in every municipality; and if he is of the opinion that the assessment is not what it should be he can go in and order it increased by a certain percentage.

He did that to us as late as March of last year, when we were instructed to increase our assessment by $12\frac{1}{2}$ per cent. He has a basis, which is now 60 per cent of the replacement cost of 1953, depreciated up to the present. That is the basis on which they are working.

MR. GUSHUE: Does that mean it is equalized right across the province?

MR. JONES: Yes, that is the supposition.

MR. GUSHUE: When you say that, is it the reality?

MR. JONES: I will say it is the intention of the act; perhaps I should put it that way. It has only been in effect since 1953, when the act was passed. Last year was the first year. The suggestion is that it will take 4 years to equalize the assessments.

THE CHAIRMAN: I would like to ask one more question about the rehabilitation of certain areas in the city. You said "other than residential" in talking about the need for aid, but I would like to be more inclusive in the question I am about to put.

If it should be felt that there are areas in the city that have deteriorated and that should be redeveloped or rehabilitated; and if measures were put forward which would handle the finances involved in connection with the rehabilitation, would there be difficulties here in the municipal authorities taking action to expropriate the areas in question, or do you think that could be done without too much difficulty?

MR. BROWN: We are doing it all the time for different public purposes, using our expropriation powers.

THE CHAIRMAN: You do if you have to build a customs house or a post office; but if it were a larger area, including perhaps

some residential districts, would you be able to go ahead and do it, or would there be a great deal of opposition?

MR. HUME: We have been buying for some time old houses or old homes on land not so far from the post office building, that we are going to use for a new auditorium; and it is surprising how much that land is worth now. A few years ago it was not worth very much; now they find in a roundabout way that it is going to be used for certain purposes, and it immediately becomes very valuable land and they are very valuable homes to be torn down. When we had to buy the land for the approaches for Granville Street bridge, they became worth a lot of money. If you take and put a new subdivision on the market by tearing down a lot of old homes, we have quite a battle to get them.

THE CHAIRMAN: Is it a battle that you think you can win by just being tough and expropriating them, and if necessary using the expropriation procedure to set values; or do you have to go around and try to buy them up?

MR. HUME: At one time there was a shortage of apartments; at one time there was a shortage of homes, and every C.N.R. and every C.P.R. train every morning would bring in new people to Vancouver. So in spite of the fact that these were old houses, we could not force the people out on the street because we did

not have sufficient new homes to put them in. Consequently there are many old houses around that we cannot put people out of because there is no place for them to go.

THE CHAIRMAN: I am thinking particularly of Vancouver, but this is a problem which applies to every city; and on that principle how are you ever going to get these areas which should be rehabilitated torn down and built up again?

MR. HUME: We will have to do it in a quiet way; otherwise it will cost a lot of money.

MR. BROWN: As you know, Mr. Chairman, the National Housing Act includes no power to do this because that must come under the provincial act, but it has power to bring in the financial provisions. Currently in the British Columbia act there is power to clear out these blighted and slum areas. I assume your question relates to the political difficulties of doing this, and not the legal difficulties?

THE CHAIRMAN: That is right. I am not worried about the legal difficulties.

MR. BROWN: The only example in Canada that I am aware of is the Toronto Regent Park scheme. I know of no difficulties they had in clearing out the existing slum tenants. There are other schemes projected in Toronto and in Montreal; but where it has been operated fairly

extensively in the United States there has been no difficulty that I know of in expropriating these properties, because there is a system of offering alternative accommodation as part of the whole project, and of course that has to be done very carefully.

So, speaking personally, although we have not had an example of this particular thing in Vancouver, we have done it to a minor degree in the reassembly of property without any difficulty at all, because we do pay a fair market price for the property, and if there is any disagreement on price there is the opportunity available for arbitration. So it is not a case of expropriating at the city's price, and that being a price which is unreasonable. It is all done according to the procedure of the law, and we pay a fair price.

THE CHAIRMAN: I do not want to pursue the question. I think you have answered the thought I had in mind. There seems to be little question but that over the next 25 years there will be a need to do a great deal of this, and we want to get some expression of views as to whether the political opposition on the part of the people who are going to be expropriated would be so serious that the measures might not have much chance of success. I think you put your finger on it when you said that alternative housing would have to be

provided as part of the project.

MR. GUSHUE: I have a question somewhat along the same line. Suppose the city wants to block out an area for industrial expansion which includes private lands. Have you the right to expropriate there?

MR. BROWN: We have the right under our charter, but we do not get any grants in aid for the loss which results.

THE CHAIRMAN: Well, thank you very much, Your Worship. This has been a very interesting brief, and certainly from our point of view we have gained a lot from it.

MR. HUME: Thank you very much, Mr. Chairman and gentlemen, for having us here this morning. We are at your call at any time you may require us.

THE CHAIRMAN: Thank you very much.

--=Recess.

---After recess.

THE CHAIRMAN: Well, gentlemen, shall we come to order. The next item on the agenda is the submission by the forest industries of the province, which will be presented by Mr. Mahoney of Management Research (Western) Ltd.

MR. JOHANSON: Mr. Chairman and Messrs. commissioners, before introducing Mr. Mahoney I would like to introduce myself. My name is Johanson. I am the secretary of a committee which was drawn from eight forest industry associations on the coast of British Columbia and in the interior, who join in this brief to this royal commission, prepared for us by Western Management Research.

There are present a number of executive officers of the participating associations whom I would like to introduce to you. For the British Columbia Loggers Association, Messrs. O.B. Hollies and John Burke. For British Columbia Lumber Manufacturers' Association, Mr. Bentley and Mr. Draeske. For the Canadian Pulp and Paper Association, Western Division, Mr. J.A. Young and Mr. Manley. For Consolidated Red Cedar Shingle Association, Mr. Whittall. For the Interior Lumber Manufacturers' Association, Mr. McDiarmid and Mr. Ross. For the Northern Interior Lumbermen's Association, I am afraid

they have no representation; their office is in Prince George. For the Plywood Manufacturers' Association of British Columbia, Mr. Armstrong and myself. For the Truck Loggers' Association, Mr. Harry McQuillan.

Sir, I would like now to present Mr. R.A. Mahoney, who will give you a review and summary of our brief.

MR. MAHONEY: I intend this summary to be very brief, but any questions which come up afterwards, the industry representatives and myself are here to attempt to answer them to your satisfaction, because we certainly want you to have all the information we can possibly supply.

This summary is merely an attempt to refresh your memories. We start out by pointing out the importance of the forest industry in Canada, mentioning that forestry represents 15.2 per cent of the total net production in Canada, and that British Columbia has one-quarter or 25 per cent of the Canadian forestry total; also that forestry in British Columbia accounts for approximately 40 per cent of the gross value of production in the province. That 40 per cent figure we believe is a minimum, and will be further substantiated at a later point in the brief.

In the first place we start out in the forest itself and attempt to take a look at the amount of timber which can be cut in British

Columbia. As pointed out, it is extremely difficult to arrive at a definite figure; almost impossible to say that at this time, so much can be cut on a sustained yield basis. But we do come up with two main conclusions; that there is a potential cut on a sustained yield basis in British Columbia forests of 3.6 billion cubic feet, which is approximately four times the amount presently being cut; and that the large volume of mature timber in British Columbia forests at the present time suggests from our standpoint that cutting should not be restricted until this mature timber has been satisfactorily harvested.

We also indicate that the provincial government owns 90 per cent of the productive forest land in the province, and that this land operates on various types of leases, so that the determination of forestry policy in the future depends to a very considerable extent on provincial government policy.

We then switch to the question of lumber production, going into some detail as to the nature of lumber production and the nature of the geographical area; and I think the conclusions, four of which we reach on page 16 of the brief, are significant with respect to the entire question of lumber. Those conclusions I shall read:

"(1) While there should be a moderate and steady increase in domestic demand for lumber, nevertheless the major portion of the demand must come from export markets.

(2) The demand for lumber will depend to a certain extent upon the comparative price of lumber in relation to substitute construction products.

(3) The coast area of the province is not likely to increase its output of lumber substantially as long as lumber remains the most marginal of the three major forest products."

Those other three being pulp and paper, plywood and shingles.

"(4) There is still ample timber to allow for the expansion of lumber production in the interior of the province."

Having arrived at those conclusions, we go on to make an attempt to forecast something of lumber demand in the future; and as a statistical basis for our forecast we have used the Stanford report which was written for the

Weyerhaeuser Timber Company dealing with the Pacific northwestern United States, but we have adopted many of its conclusions because the report was very extensive and a great deal of time and work was devoted to it.

Using that as our basis, we have come up with an increased demand in the United States by 1975 for lumber of 3.5 billion board feet. In addition to that increased demand, all of which it is anticipated will come from exports, we have gone along with the suggestion that there will be more imports needed by the United States because an increasing proportion of their wood harvest will go into more refined forest products.

As a result, we have said 3.5 billion board feet as an increased demand, plus some other unknown quantity, possibly 2 billion board feet, which will come as increased demand by 1975 because we cut down on the present amount of wood which is going into lumber, which means that by 1975 the United States could be a market for three times the total amount of lumber presently produced in British Columbia.

We then look at Canadian demand, and in the light of the comparatively small market in Canada compared to the United States market, even with some assumptions which would increase Canada's demand relative to United States demand, we suggest that the increased demand

in Canada for British Columbia lumber will be 325 million board feet, or approximately 10 per cent of the potential increase in the United States demand.

In attempting to forecast United Kingdom and export market demand, we acknowledge that it is a very difficult job. The number of board feet going into a typical residential dwelling in the United Kingdom and European markets is not nearly as great as on the North American continent. It is mentioned that some promotional work is being done overseas. At the present time our United Kingdom market is very important to British Columbia's economy, and we have stated that the United Kingdom and other export markets combined should continue to take the same volume of lumber from British Columbia in the next 25 years as at the present time. We feel that is a minimum forecast, an extremely conservative forecast.

Then we switch from lumber to plywood, pointing out that the present production of Douglas fir plywood in British Columbia is almost 1 billion square feet; and if we apply the forecast demand increases as stated in the Stanford report to plywood, the demand in Canada should go from 1 billion square feet, or almost 1 billion square feet, to almost 2.5 billion square feet. We have added a word of caution, in that at the present

time we use more plywood per capita in Canada than they do in the United States, so for that reason that forecast could be on the high side.

In shingles there has been to some extent a decreasing demand, both as roofing material and as siding material, because of substitute products. Nevertheless, in the last few years the industry has gone out on a very aggressive promotional campaign, and we have estimated that the demand for shingles, at 2 million squares, will remain approximately constant for the next 25 years.

The next product which is dealt with is pulp and paper, and in this particular submission we have not forecast this in the same manner in which we have dealt with the other products, primarily because the pulp and paper industry is organized and its statistical tables and its figures tend to be on a national basis rather than a provincial basis. In addition, the pulp and paper association is putting in a detailed brief to this commission in January in Montreal, I believe. Therefore that would provide some sort of supplement, or this would provide a supplement to their brief.

The main conclusions we have reached with regard to pulp and paper are that the demand in the United States is going to increase tremendously, but they are going to take care -- this is the Stanford report again --

largely of their own demand by wood being diverted probably to pulp and paper manufacture and away from lumber. The increase in demand in the United States which it is expected to be imported, probably from Canada, by 1975 is only 10 per cent. We have detailed pulp and paper expansion to a certain extent in this province; therefore our increased pulp and paper production in British Columbia must find export markets largely other than the United States. That is the main conclusion we have come up with there.

We have included a short section on the possibility of new methods and new products in the forest industry, which could change our forecasts or could make much of our present thinking obsolete. We have not expanded that, because obviously it is the sort of thinking which becomes very difficult to carry on. However, the possibility of new products and of new developments is mentioned.

We then spend some time trying to point out to the commission the difficulties which face the forestry industry generally in the province. We have mentioned taxation. We have been specific in some of the new taxes which have recently been imposed on the industry, and which we feel are burdensome and because of which we feel the industry is being asked to bear more than its share of the financial burden of the province.

We have mentioned a need for a depletion allowance as far as the timber limits and timber are concerned. We have pointed out the desirability of stable employee relations. Many of these difficulties are important because of the large percentage of the provincial industrial picture which is occupied by forest industries of one kind or another.

We have briefly described some of the research which is being carried on. We have stressed the need for research, and made a specific recommendation that if nothing else is done, the present research needs be integrated. It is felt by the industry that in many cases one hand does not know what the other hand is doing.

The high transportation costs throughout all aspects of the industry are stressed at various points throughout the brief; and high transportation covers a lot of territory. It has regard to the long logging hauls from the cutting area to the sawmills, and it has rail transportation and marine transportation all as important aspects of the picture.

We then spend a brief time and devote a short section to secondary industry in the province, because we felt this commission would be extremely interested in that. Manufacturing is now, or was in 1953, 48.9 per

cent of the net value of production in British Columbia, as compared with a figure of 39 per cent, I believe, in 1938. Those figures are in the brief.

We estimate that secondary industry, manufacturing particularly, will represent 60 per cent of the province's net value of production by 1975; and we have illustrated that the forest products industry has kept pace, at least, with this increase in secondary industry production, because the forest industry is responsible for at least 40 per cent of this manufacturing and secondary production and indirectly, of course, considerably more than 40 per cent, because there are many manufacturing industries which are here only to serve the forest industry, but which do not appear directly as part of the forest industry.

Just a word about the overriding spirit of the brief. The industry has felt that it is very difficult at a time when conditions are booming, when things are good, to present a submission such as this and point out the dangers and road blocks on the way, because it looks like expansion at the present time. But I think we are all very aware of the fact that a slow-down in economic activity, with things not quite as rosy in the economic picture as they are now, with the high costs and the large capital investments, and those inherent difficulties

in industry could change the picture very greatly. So we have tried to include that all the way through the brief, without appearing unduly pessimistic or appearing to take a negative approach to this whole problem.

That concludes my summary, gentlemen, and thank you very much.

THE CHAIRMAN: Thank you very much.

MR. LUSSIER: Mr. Mahoney, you state in your brief that there is a potential of 3.6 billion cubic feet to be cut on a sustained basis in your forests. You indicate that there is a great proportion of natural forests, although you could not say exactly the area. I understand that there is a very great proportion of natural forests here, and that those forests are mature for cutting; that they are all virgin forests.

Now, is it your opinion that these mature forests are being kept on an equilibrium of productivity, or are they decreasing?

MR. MAHONEY: Could I call upon Mr. Johanson to speak to that question?

MR. JOHANSON: Mr. Lussier and Mr. Chairman, as I get your question you are questioning the ability of the productive forest land to produce under sustained yield management the figure that is mentioned in the brief?

MR. LUSSIER: Yes.

MR. JOHANSON: That is the potential. At the present time the forests of British Columbia are not in balance from the point of view of sustained yield. We have about 75 per cent of the productive forest lands occupied by mature forests which are not putting on any increment at the moment; and until those mature virgin forests are harvested and the productive land brought under sustained yield, that potential of course will not be operative. Does that answer the question?

MR. LUSSIER: Yes; but in your mature forests I understand you will not cut them for at least 50 or 60 years?

MR. JOHANSON: That could be so.

MR. LUSSIER: In the meantime do you expect that those mature forests will keep their productivity as it is now?

MR. JOHANSON: Yes, I think so. They range from 300 to 600 years old now; and while there is a certain amount of deterioration it is probably not out of balance with the growth that takes place as well.

MR. LUSSIER: What kind of cutting do you apply to your forests; is it clear cutting or selective cutting?

MR. JOHANSON: On the coast it is clear cutting. In the interior I believe there is some selective cutting. The forest service in some of their sales mark the trees to be taken.

MR. LUSSIER: I notice, too, that there is mention of a rotation age of 60 years. You mean by the rotation age, probably, the time it takes for a young tree to become a mature tree?

MR. JOHANSON: That is right.

MR. LUSSIER: That 60 years you mention is for the coast forests?

MR. JOHANSON: That is right.

MR. LUSSIER: Do you think in 60 years from now in those forests you will get the same kind of lumber that you have today? I mean to say, the same diameter of tree and so on; or are you going to change your industry in order to comply with the new kind of forest which you will have?

MR. JOHANSON: That is right.

MR. LUSSIER: You will have to?

MR. ANDREWS: Definitely. We will not reproduce the old growth timber that we are now cutting in 60 years, but in 60 years we probably will be harvesting from many of our cut-over lands now for pulp and paper, and on the coast we should get an economic yield in the rotation of probably the majority of the sites, the average sites.

MR. LUSSIER: I notice that you take into account the danger of fire, diseases, and insects. In your mature forests have you any amount of disease and insects?

MR. ANDREWS: There are some defoliating insects which have been epidemic in spots. There are some losses through wood borers.

MR. LUSSIER: Any budworm?

MR. ANDREWS: Spruce budworm?

MR. LUSSIER: Because I see that in the United States they have the problem of budworm not far from here. You have not the epidemic here?

MR. ANDREWS: No, we have not any large epidemics at the moment.

MR. LUSSIER: Have you any suggestions to make about checking the forest fires, to improve the situation in that regard?

MR. ANDREWS: I think there is a general, steady improvement in the effectiveness of our fire protection, particularly on the coast. Our fire losses are definitely being reduced. We have not yet arrived at the point where perhaps it is an insurable risk except in the mature old growth timber, but we have reduced our fire losses very materially, and it is very encouraging that that is so.

MR. LUSSIER: In your experience do the fires spread more in the cut-over areas than in the mature forests?

MR. ANDREWS: Very much so.

MR. LUSSIER: Do you think something could be done to prevent that?

MR. ANDREWS: As the more mature timber takes on increasing values, as it has in the last 10 years, then there will be more effort put into protecting it. The private companies are building up very effective and very extensive fire prevention and fire fighting facilities, in addition to what the government is doing.

MR. GUSHUE: Might I ask a question or two along the same lines as those of Mr. Lussier. In taking out the balance of the mature timber, will any damage be done to the immature growth; or is that provided for?

MR. HOLLIES: In some cases there would be damage to the second growth, and in other cases you can definitely go around it. In our own logging today, in some of our various companies, they are taking out this so-called immature timber along with the old growth. Otherwise you would completely ruin it so there would be nothing left of it. But where it is completely immature stands, usually we can go around it and leave it and not damage it in any way.

MR. GUSHUE: Is that a general practice?

MR. HOLLIES: It is becoming more and more so. It was not several years ago, but we are all moving more and more in that direction.

MR. GUSHUE: Is there any cutting, or has there been any cutting in recent years, which has no regard to reseeding or the keeping of the forest on a sustained yield basis?

MR. HOLLIES: Sure; there are probably some operators who work in that way. But for the most part they are going the other way. They are becoming very conscious of reseeding and keeping their lands in growing condition.

MR. GUSHUE: It is a matter for the operator, I take it?

MR. HOLLIES: That is right.

THE CHAIRMAN: I have some questions I would like to ask. I am not familiar with the industry, so some of these questions may be obvious to you.

On page 9 of the brief you make the statement that you strongly recommend that there should be no question of restricting the over-all cut of either the coast or the interior until the bulk of the mature timber has been harvested. I presume that statement applies both to privately owned and government owned timber?

MR. ANDREWS: Yes, sir.

THE CHAIRMAN: Is there a suggestion that some kind of restriction should be introduced?

MR. ANDREWS: Well, Mr. Chairman,

for many years prior to the royal commission which sat in 1945 there was a great deal of propaganda put out from various sources that we were over-cutting, particularly on the coast. From the inventory that was used as a basis for the findings of the first royal commission, the report of the commissioner gave considerable weight to statements made by officials of the forest service, for instance, that we were in a dangerous position in regard to over-cutting.

When the inventory was completed for this royal commission which is now sitting, the inventory showed such a tremendous increase by reason of the improved utilization and more effective use of what is on the land that we feel fully justified in pointing out that the present position does not indicate any justification for controlling or reducing the cut from the point of view of a sustained supply of raw material for existing industries. As far as we can see in the future, in fact, there is very considerable room for increased utilization, increased cut, in the interior of the province.

THE CHAIRMAN: Would that be more or less a unanimous view of the people in the industry?

MR. ANDREWS: I would think that is so, sir.

THE CHAIRMAN: And you refer to the forestry service. Would they have changed

their minds on that subject now, in view of the new inventory?

MR. ANDREWS: I think that is the position they take now.

THE CHAIRMAN: So there is no feeling now that there should be restriction?

MR. ANDREWS: No, not as far as we know.

THE CHAIRMAN: On page 10 there is a reference to the need for adequate permanent access roads. I presume the operators are responsible for the roads within their particular limits?

MR. ANDREWS: That is right.

THE CHAIRMAN: And these access roads lead from the main arterial highways to the limits; is that correct? When does an access road stop being an access road; that is what I am looking for?

MR. ANDREWS: Well, the access roads lead from the main arterial highways in the interior, or from the centres of manufacturing out to the timber. I guess frequently the access roads lead from tidewater up into the interior, in to the timber.

THE CHAIRMAN: Does these roads serve any other purpose than to provide access for the lumber operations?

MR. ANDREWS: I think the roads that are mentioned as access roads primarily are

a means of bringing out the timber, and really have no other immediate use.

THE CHAIRMAN: So that if they were not constructed and paid for by the provincial government they would have to be paid for by the industry?

MR. ANDREWS: The industry builds its own roads on its own property, of course; but what is referred to here as access roads is provision to get into the territory, to open up territory and permit operating on a rational plan, on a rational cutting plan. Those roads in the majority of cases should not be paid for out of the immediate harvest of the year, the year's cut.

THE CHAIRMAN: They represent a long term, large investment that would have to be amortized over a long period of years?

MR. ANDREWS: That is right.

THE CHAIRMAN: Does the industry contribute directly to that amortization? I know you do through your taxes, but is there any assessment on an amortized basis for those particular roads?

MR. BENTLEY: As far as I know, sir, there has hardly been any building of such access roads by the government.

THE CHAIRMAN: You are advocating --?

MR. BENTLEY: But we do advocate that it should be done, and I believe our

suggestion deals mainly with the interior. The coast, because of its geography, is an entirely different proposition. There are, so to speak, no arterial highways on Vancouver island.

THE CHAIRMAN: In the interior, where you are recommending the construction of these access roads, how are you proposing that they should be financed?

MR. MCDIARMID: Mr. Chairman, the point we are trying to make here is that this greatly increased inventory that has been shown by this recent commission takes into account some vast areas, particularly in the northern part of British Columbia, to which there are no present roads whatsoever. No individual operator, for example, could build an 80-mile road out of Prince George in to 100 million feet of timber, because the life of his operation up there would not justify the cost.

However, that particular block of timber might involve some several hundred million feet, in which case if the government could see their way to build a road it would probably support 8 or 10 operations up there.

THE CHAIRMAN: What I am trying to find out is, do you think the cost of that road should be spread over the whole area?

MR. MCDIARMID: The cost of the road would be self-supporting in the stumpage yield, which presently they do not get. The

timber is over-mature. It may burn. Lightning fires in the northern part of the country take a lot of timber, and we might have a total loss of that several hundred million feet because there are no access roads for firefighting or anything. A reasonable stumpage rate would defray the cost of the road and provide a tremendous amount of employment.

THE CHAIRMAN: That is what I really wanted to get at. Your recommendation is that the provincial government build these roads, and that it would be a good thing for them to do because through the stumpage rates they would get more revenue than the roads would cost; but you would not suggest a specific assessment in addition to the stumpage rates to defray the cost of the roads?

MR. MCDIARMID: No, because actually the industry could not stand that, since in that sense they would not be as competitive as people who presently lie alongside a railway, or have easy access otherwise. If the industry were expected to pay not only the normal stumpage rate but a contribution toward the cost of the road, they would actually not want to go up that far.

MR. LUSSIER: With regard to the stumpage rates, are those rates liable to change every year or so?

MR. MCDIARMID: The stumpage

rates fluctuate in a three months cycle. The forest service takes the average sale price of lumber and uses a formula according to a table, and when there is more than a 15 per cent fluctuation in the average sale price up or down, there is an automatic adjustment in stumpage rates.

MR. LUSSIER: Do you not think if you do not take the responsibility of the amortization of your roads, those stumpage rates might be changed to your disadvantage?

MR. MCDIARMID: I see what you mean; but part of the formula that is used to calculate the stumpage rates is an allowance for the cost of hauling, which is your cost of road; so it is taken into account. If you log 100 miles away from rail transportation, for instance, your stumpage would be several dollars less than the stumpage of someone else 10 miles away from rail transportation. So they do take into consideration your hauling charges and road costs. We all have to build our own roads today, actually; but we feel that a great many of the outlying areas would be developed and would be opened for settlement if roads of that nature were built.

THE CHAIRMAN: Under this same paragraph, which is headed "Prerequisites for Sustained Yield" the second point which is made is this:

"The second is that, as soon as possible, a balanced growing stock must be established from which increment or yield can be harvested annually."

Mr. Mahoney, would you mind explaining that sentence? I do not quite follow that.

MR. HOLLIES: That refers to the laying out of the working plans in the various regions so that a balanced growing stock, which is essential to sustained yield and on which the increment is to be found year by year, is established. At the present time it is not in balance. There is too much old growth timber, which is static, and not enough of the immature timber which should be building up the increment.

THE CHAIRMAN: Thank you. At the bottom of that page, in commenting on the table which is set out, you say:

"An analysis of this table indicates very forcibly that the future of forestry in British Columbia is almost entirely dependent upon government policy with regard to tenure."

I do not follow that.

MR. HOLLIES: At the present time the government, as indicated by the table, owns about 90 per cent of the productive forest land. The government cannot hope to successfully manage that much productive forest land. The government must, by some means or other, put private enterprise on that productive forest land to manage it and to produce, because 90 million acres of the total productive forest land, which in all totals about 180 million acres, is owned and largely occupied by the government. The government has not the facilities, the resources, the trained men or the means to intensively manage that land.

THE CHAIRMAN: But what is their policy at the moment? What do they do?

MR. MCDIARMID: They have a policy at the moment of granting forest management licences. There is quite a bit of opposition to that, and possibly some other form of tenure may or should be developed in order that the government may get the necessary private enterprise operating and managing these lands.

THE CHAIRMAN: What exactly does the industry think should be done?

MR. MCDIARMID: The industry is not of one mind on that. There is quite a difference of opinion as to the best means. Some sections of the industry feel that the

government should not dispose of mature timber, particularly, except by auction, by tender; whereas under the present forest management licence plan, the government is able to pool certain crown timber, mature timber, with private timber to make up a management licence, which is then operated under contract, a long-term perpetual contract for sustained yield.

MR. GRAUER: To round out the present picture, should you not also mention the public working circles?

MR. MCDIARMID: Yes. At the same time the government is setting up public working circles which are managed by the government on a sustained yield basis; but they probably are not getting along fast enough with providing public working circles that will enable the existing logging industry to secure stumpage as fast as they want it, and where they want it.

MR. BENTLEY: I think Mr. Hollies could contribute quite a bit in connection with the situation in the northwestern United States.

MR. HOLLIES: In the Pacific northwest it is pretty much tree farming. The companies have gone into the tree farming pretty extensively, where they manage it themselves and there is very little if any government control in these so-called tree farms in those two states of Oregon and Washington. The United States forest service owns quite a lot of

timber, and it handles and controls anything that should be done on its own lands. I forget just what the ownership is, but I think it is about 50 per cent private down there and 50 per cent government. I will not say that is exactly so, but it is not very far off.

They have done a very good job in managing their lands in those two states, and of course here in British Columbia we have a 90 per cent government ownership. While the forest service are very competent in doing the job, they do not have the money or the personnel to manage the forests in the same way.

I do not know if there is much more I can add, except that all the companies in those two states, particularly the big ones and some that are not so large, are doing a very good job of tree farming there. They realize that they have to keep those lands in production for future crops, so that it falls on each one of them to get the most out of every acre they possibly can.

THE CHAIRMAN: If they do not do so what is the remedy?

MR. HOLLIES: You mean the penalty?

THE CHAIRMAN: Either one.

MR. HOLLIES: You just wont have as much wood.

THE CHAIRMAN: It is left to the individual. If he wants to mine it and get out,

he can do so?

MR. HOLLIES: That is right. I might explain a little bit about Mr. Andrews' remarks when we talked about the rotation age. The feeling down there particularly is very strong that it should be about a 60 or 70 year rotation age. After you get up to that age your forests start to remain static and you do not get the growth out of the land; so that as long as particularly the pulp and paper industry will start removing that material from the land at 60 or 70 years you are going to have the maximum growth potential on those lands.

MR. LUSSIER: So I understand you would rather like private ownership of the forests instead of the system you have now?

MR. HOLLIES: Well, there are lots of different opinions on that. There are opinions both ways. Maybe with our own company -- not as an association but as a company -- we would perhaps recommend private ownership; but that will never be in British Columbia.

THE CHAIRMAN: Which is your company?

MR. HOLLIES: Ours is a Canadian corporation whose parent companies are large tree farm operators in Oregon.

THE CHAIRMAN: Well, I think most people are familiar with the job which you people have done; but have all the operators in the parts

of the United States you referred to done equally as well? I do not mean in making money; I mean in conserving the forests.

MR. HOLLIES: You mean in conservation, in tree farming?

THE CHAIRMAN: Yes.

MR. HOLLIES: Yes, I could probably name quite a number of companies that have done a very good job in tree farming.

MR. LUSSIER: But is it the majority or just a few companies?

MR. HOLLIES: It is a majority of the land; put it that way. It is the great majority of the lands that is operated in a very good way.

THE CHAIRMAN: I think you said there was a difference of view here as to which was the best approach for British Columbia, and you mentioned the view which your company holds. Would the larger companies, generally speaking, hold the same view, would you know?

MR. YOUNG: It could be suggested that in the light of the presently sitting royal commission on the subject, the report from that commission which will be forthcoming within the next year would possibly be a good basis for your conclusions.

THE CHAIRMAN: It may not be in time for us. We are not planning to keep this commission going forever.

MR. YOUNG: In any event the subject is one which I am afraid we could not possibly reach a conclusion on.

THE CHAIRMAN: You mean there is a difference within the industry?

MR. YOUNG: Yes.

THE CHAIRMAN: Then we will drop the subject. I think it was because the subject was dealt with in such a tactful fashion in the brief that I wondered what it meant.

MR. GUSHUE: I wonder if we could have a brief explanation of the operations of the forest management licence as opposed to the public working circle?

MR. HOLLIES: That is an awfully big subject, and I might need a lot of help on it; but to start with, if you are going to have a management licence you should put the land which you might have, that you might own or control, within a particular watershed. It might extend over several watersheds, but let us confine it to one.

MR. GUSHUE: You mean put some of your own lands in?

MR. HOLLIES: Not in all cases it is not done that way, but if you have lands and you are going to get government lands in a particular watershed, then you are supposed to put those lands in, but there have been management licenses granted in which there were

no lands contributed whatsoever.

Then you submit an operating plan to the forest service, and you go through that procedure of advertising and so on; and if it is approved all the way through you are granted a management licence.

Then as you operate, I believe we submit 5 year plans and then it is changed every so many years, and the forest service continues to approve that operating plan. In other words you must operate under their jurisdiction. You are responsible for fire protection, reseeding, insect control, the building of roads necessary to log the timber, and in some of the recent ones there have been requirements that certain roads be built which I think are going to be for public use either at that time or at some later stage.

The stumpage is worked out from time to time on the basis of the Vancouver log market, which is adjusted probably every three months, so that it is not a fixed stumpage for a long period of time. I am told the stumpage under the management licence is fixed once a year for that particular year; I thought it was more like the timber sale. Our licence is not in operation yet, so we are not into that position.

Is there any further question you would care to ask?

MR. GUSHUE: Do you intend to go on to the public working circle?

MR. HOLLIES: In the public working circle, there have been public working circles established which are then under the control of the forest service as to limitation of cut in the particular area in which the public working circle lies. Timber sales are issued in the public working circles; in other words someone in that particular area could apply for a timber sale and the sale will be put up. If they are the successful bidder they will operate it, and when the sale is finished the area falls back to the government to look after it as far as further control in regard in fire and insects and so on is concerned.

MR. GUSHUE: You might have a number of operators in the one circle, then?

MR. HOLLIES: That is right.

THE CHAIRMAN: On page 13 you talk about the cost of forest management and suggest that the entire population is benefited to the extent to which increased forest management enhances the value of the forests; and you point out that if increased forest management saddles the operator with such increased costs that it discourages industry expansion it is then detrimental rather than beneficial.

We have been hearing quite a lot about the tremendous expansion that has taken place

in this industry in British Columbia since the war, and certainly when we were in Victoria it was suggested to us that the expansion in the next 25 years would be very great indeed.

Under those circumstances, and at the present levels of prices, and presumably with the expectation that future profits will include some element of appreciation in value if prices continue to rise, at least to the extent of the timber that you own or have a right to under these licenses -- if these optimistic forecasts are fulfilled, would it be beyond the capabilities of the industry to handle itself the cost of the measures which you are referring to here?

MR. ANDREWS: There are two points to that. About one-third of the cut of the province is on short term government timber sales, on which the stumpage values are imposed at practically all the traffic will bear.

The other is that a great deal of the expansion which has taken place in the last 5 or 6 years has been by way of the better utilization of mill residues, and also closer logging on the land. At present we are producing from mill residues about 1 million units of pulp chips a year, which represents a good portion of the expansion that has taken place as far as the consumption of raw material is concerned in these plants.

THE CHAIRMAN: What you are really suggesting, then, I suppose, is that if the industry is expected to spend large sums of money on forest management, the stumpage dues should be adjusted to take into account those added costs. Is that putting it too crudely?

MR. BENTLEY: I think that is right. We want to stay competitive, and the government can do its share by keeping stumpage on that basis.

THE CHAIRMAN: As a matter of fact there is a further reference to the question of stumpage costs at the bottom of page 15, where you point out that as your costs of operation increase when you have to move away from the easily accessible stands, in order to remain competitive the province has to keep in mind that the object of the exercise is to sell your lumber.

MR. BENTLEY: That is correct.

THE CHAIRMAN: Mr. Mahoney, on page 19 you refer to the forecast that you had used in regard to the estimate of population increase. I gather you think it is a good forecast, and I just wondered who had made it.

MR. MAHONEY: It is in the appendix. It was done by Research Associates.

THE CHAIRMAN: In talking about markets on page 23, you say:

"It should be noted that the prospect of additional sales in the

United Kingdom depends largely on the extent to which United Kingdom goods are able to earn Canadian dollars. The plywood industry in British Columbia favours elimination of Canadian barriers to this two-way trade."

I know that some prominent citizens of this province have been actively interested in stimulating the importation of British goods to a greater degree. As a matter of fact, until quite recently I was on the same board with them; and while I think some of the representatives on the council or board -- I always get the name mixed up -- and while of you here did quite a bit to increase importations from the United Kingdom of specific goods, it was my feeling by and large that the efforts of that body were not tremendously successful; that the truth of the matter is that Canadians are so close to the United States that we are inclined to buy the goods that we hear more about through United States advertising or that we may know more about for other reasons. In some cases the managers of Canadian factories which are controlled in the United States might like to use the same equipment that is being used across the line.

So it does not seem to me that the decision is made altogether according to price,

and I wondered what the industry had in mind specifically when you urge that we in Canada should do something to make it possible or to encourage the buying of more British goods in this country. What specifically do you suggest?

MR. JOHANSON: This comes under the plywood section. I am afraid there was not anything specific. There was just a pious hope that the balance of trade could be rectified or at least not further aggravated.

THE CHAIRMAN: It is a pious hope that I am sure would find great support; but to get past the pious hope is something that I think everybody recognizes as most difficult.

MR. BENTLEY: I believe we here can do very little except buy all that is suitable that is coming out from Great Britain. I think part of the difficulty lies in the fact that the British manufacturers are not working to our specifications, because they are busy and can sell everything they produce in other markets, different types of equipment, and they do not come out here and sell us what we want. We just will not buy things which are not suitable, and I think that is the basic reason we cannot buy more from Great Britain as an industry. There were a few instances of this which have been publicized lately, where firms here have gone out of their way to try to work out some successful experiments, but it was not supported from Great Britain, and they are the people who

should look after that.

THE CHAIRMAN: Well, all right; but if you were a British manufacturer and you had all the work you could handle; then if you had to go to considerable trouble to manufacture special goods for the Canadian market, to Canadian specifications and meet very fierce competition in the process, because competitive conditions here are much keener, it seems to me, than they are in other places where the British are selling their goods -- why would you do it?

MR. BENTLEY: That is the big question. Unless they are forced to do it, I do not see any solution.

THE CHAIRMAN: Well, we cannot force them, I suppose. I wanted to ask the question because it is something that has come up previously.

MR. BENTLEY: Basically the industry here realizes the situation. We know they can buy more if we buy more from them. There is no question but that all other things being equal, they would get the break.

THE CHAIRMAN: I raise the question because in your brief you point out that we should be buying more from them. In other places we have been it has been suggested that the solution is the opposite one; that we should grant sterling credits of some kind, in other words sell on the cuff. Nobody

has suggested the extent of the credit that should be extended, and I just wondered whether you had anything more specific to say.

MR. ANDREWS: I might suggest that we had in mind, for one thing, that the iron and steel people of Canada are pressing very hard for more protection, which will certainly affect the present market the United Kingdom has in Canada.

THE CHAIRMAN: Why will it? That is what I want to get at. I do not want to deal with the question of protection of the steel industry, but I know there was great pressure on the British to sell various types of steel and steel shapes in Canada at one time, and they raised the same problem:

"Well, the market is pretty small, and we are not going to tool up to supply a relatively small and uncertain market that can be very competitive."

MR. ANDREWS: Well, they have quite a substantial market in Canada at the present time. Then there is the other question of the intercoastal trade. If the shipping interests in Canada cut the British out of the present agreement to participate in Canada's intercoastal trade, that again is a matter of considerable concern to British Columbia.

THE CHAIRMAN: On page 26 you are talking about shingles, and you say:

"--the only reasonable prediction that can be made is that the declining trend in shingle and shake use which has been going on for many years has slowed down and that the research and development being done by the industry may succeed in keeping the demand for shingles and shakes at the same quantity level that has existed over the past 10 years."

I wanted to ask you whether that was a realistic forecast. Presumably a considerable amount of research and development will be going on in the various substitute materials as well, and the question is whether you can do anything or do enough to overcome what they are doing. Do you feel confident about this prediction?

MR. WHITTALL: I had better reply to that. The shingle industry has lost business over a period of many years. It started out by being a roof market, but as other low priced shingle materials came on the market, they stole our market from us.

Some years ago we started a programme of making shingles as a wall market; that is, we took our shingles and we striated them

and made a sort of design on the surface and had a method of applying them over a low priced shingle on a much wider exposure, and that immediately enlarged our sales and stopped the decline in the use of shingles.

I think that since we are now still holding our sales of walls, you might say, and in some cases increasing our sales of shingles for roofs, we should hold our own. In the last 7 years the shingle production in British Columbia has held fairly even, at slightly over 2 million squares. I think we can hold it at that.

Our main trouble, of course, is that our product is made from mature timber which has grown for from 300 to 600 years, while our competition makes its material out of waste, and it is made by machinery. We have a lot of man power in ours. They have practically none. But we have been spending a lot of money -- actually the shingle industry has spent more, I think, than the lumber industry -- to figure out the percentage of the sales price represented by labour, but we have not come up with the answer. However, we have not been asleep for the last 5 or 6 years. Perhaps we were, 15 or 20 years ago.

THE CHAIRMAN: Thank you. On page 29 you are discussing the future market for wood pulp. What are the regulations in British Columbia about the export of pulp as pulp? Can

you export pulp?

MR. YOUNG: There are no regulations in respect to the export of pulp as a manufactured material.

THE CHAIRMAN: There is nothing done to try to encourage the further processing here? Not by the government?

MR. YOUNG: Not by the government; certainly by industry.

THE CHAIRMAN: On the next page, at the end of the first paragraph, you conclude that the export of pulp and paper products from Canada to the United States may not increase by more than about 10 per cent in the next 20 years, and lower down you point out that the chief competition at the present time appears to be southern pine. Is this view a general view? Is this the view of the Canadian Pulp and Paper Association?

MR. YOUNG: I imagine that view is very generally held. I might suggest to you that you take a look at this brief which we will file as an exhibit, which is the brief presented by the British Columbia pulp and paper industry to the Sloan Commission, in which that subject is given considerable prominence. We are quite concerned about the growth of the industry in the southern states and the long term picture as to its probably better competitive position in world markets than British Columbia.

That point is developed in the brief.

THE CHAIRMAN: Thank you very much.

As I am sure you know, your association is giving this commission a great deal of help. You have put several men to work on studies for us on a full-time basis, and we are extremely grateful to you.

MR. YOUNG: I might possibly amplify what Mr. Mahoney said about the western branch, which we call our section of the pulp and paper industry out here. We have developed a rather detailed brief, and that will be submitted as an appendix to the brief of the Canadian Pulp and Paper Association; and again that subject of the competition from other areas, particularly the southern states, is developed and all the arguments are presented there.

THE CHAIRMAN: On page 31, at the end of the first paragraph, you say:

"However, it must be noted that any sudden change in the nature of power development or in the factors required for power development might suddenly place British Columbia in a less favourable competitive position than she occupies at the present time."

It would be nice if we thought we

could get Mr. Grauer back in the east again, but exactly what are you thinking of there?

MR. MAHONEY: Atomic power and other substitute sources.

THE CHAIRMAN: Do you think that within this 25 year period atomic power has any chance of competing with water power out here?

MR. MAHONEY: In that 25 years I think industry which might otherwise locate here might conceivably say that the development of atomic power is forecast in the future, so they would not be quite as inclined to locate out here because of that fact. There is also natural gas coming into this province, which might have some bearing on the subject.

THE CHAIRMAN: I wanted to ask some questions about the sections on taxes. First of all at the bottom of page 34 you say:

"On a provincial level, it has recently been taxed additionally by the Assessment Equalization Act, a Logging Tax Act, and a new taxation act amendment providing a tax on timber leases and licences. These assessments have not been favourably received by the forest industry."

Are they very substantial?

MR. HOLLIES: The 1 per cent tax has

just been recently put on, within the last 3 years, I think it is. It applies to certain timber lands only. It is not a general tax. It is 1 per cent of the value that is stated. I cannot tell you exactly what that tax is.

THE CHAIRMAN: What I was really leading up to was your reference to the dominion-provincial tax agreement. You say:

"Such an agreement should have the effect of stabilizing the future tax load by, in some manner, preventing any government from imposing sudden and unexpected taxes on any portion of our economic society."

As I remember it --

MR. HOLLIES: This 1 per cent and the logging tax are both provincial.

THE CHAIRMAN: As I remember it, in the early days of the tax agreements the question of taxes on natural resources was specifically reserved, or the right to tax was specifically reserved to the provincial governments; and I was really wondering what you would suggest. We have certain constitutional problems as well as political ones.

MR. BENTLEY: I think the industry feels there should be a little discrimination as far as taxation on natural resources goes, because

the timber industry is the only one that got those specific taxes. No other industry working on natural resources has to face these taxes. Probably the equalization is the only one. The others are specific charges against the forest industry.

THE CHAIRMAN: But it is really a complaint against the provincial government's tax policy?

MR. BENTLEY: Correct.

MR. GUSHUE: Might I ask a supplementary question? Does not the mining industry pay taxes in the same way?

THE CHAIRMAN: And the oil industry also.

MR. BENTLEY: But not a property tax of 1 per cent. Those are specific taxes.

THE CHAIRMAN: But the oil industry pays taxes.

MR. GUSHUE: I was wondering about your statement that the woods industry was the only industry directly taxed.

MR. BENTLEY: Such as the 1 per cent tax.

MR. BURKE: As I recall it, at the time the chairman spoke of, the time of the first dominion-provincial agreement, the province was given the right to tax the income of mining and logging companies, and the reason for that was that they already had the right to impose royalties

and stumpage and could take all their profits. It sounds a little silly, but it is a fact.

That was never exercised until a couple of years ago, in 1952 or 1953. I think possibly there is someone here from the mining industry today to correct me if I am wrong, but my understanding is that at that time the mining industry were remitted almost an equivalent amount of royalty and tax when the 10 per cent tax was put on their industry. The other taxes we refer to are provincial taxes which apply, outside the equalization, only to the timber industry.

THE CHAIRMAN: On page 36 you deal with federal income taxes and the question of depletion. I must say I am in a rather awkward position, because I remember acting for some members of this industry once and taking a fairly strong line on this particular point. But now that I have declared myself I am perhaps entitled to take the opposite side of the argument just to bring out the point.

A depletion allowance which is not related to cost means in effect a lower rate of tax for the particular industry. There is no question about that, I take it. That, of course, leads the taxing authorities into some difficult territory. They have to decide, or the governments have to decide, that for particular reasons industry A should be taxed at a lower rate than industry B.

So far the depletion allowances that are not related to costs are restricted to industries that are considered to have non-renewable, wasting assets. As I understand it you would suggest that such a depletion allowance be granted to the forestry industry. Despite all these difficulties the forestry industry has been fairly prosperous, and I am just wondering why you think the government should go along with such a proposal.

MR. HOLLIES: I might say that the old growth timber is a non-renewable asset. You will never renew it in the quality that we have today, and that is the feeling we have on it. It is a non-renewable asset as far as the old growth, mature timber is concerned.

MR. BENTLEY: We have a peculiar situation where the government does not get anything out of the present system. You are familiar with the subject, of course, much more so than I; but if you box your timber for \$1 and you make \$10 profit on it, the government gets income tax on \$9; you are allowed your \$1 depreciation.

If the same man sells his timber for \$10 the new operator can write off his timber on the basis of the \$10, and then there is \$10 in the book and the government gets nothing. The old operator has made a capital gain, and he does not pay any income tax.

A lot of the so-called net profits of large companies to which you are referring consist of a liquidation of timber assets acquired a long time ago and at comparatively low prices, and at the moment 50 per cent of those profits go in income tax.

THE CHAIRMAN: Of course one answer to the particular point you make about the man who sells his timber and makes a capital gain on which he is not taxed would be to tax the appreciation in value as income, in the same way they tax a farmer if he builds up a herd of cattle and sells his herd. He has to pay taxes on that appreciation, and you could argue that the two situations both result in appreciation. We have heard a good deal in the past lately about when is a capital gain not a capital gain, and I do not suppose anybody knows these days.

What I was leading up to was this: that surely a depletion allowance would not overcome that particular objection. I have heard it raised before.

MR. BENTLEY: It would help a great deal. For instance, you are familiar with the Bailey amendment in the states of Washington and Oregon on this particular subject?

THE CHAIRMAN: No, I am not.

MR. BENTLEY: There they can take the depletion allowance, and there is a capital gains tax in the United States. They pay 25 per

cent in capital gains tax.

THE CHAIRMAN: Would you suggest that here?

MR. BENTLEY: I do not know; but I think since old growth timber is not replaceable, something should be done. The same is quite true with depreciation during an inflationary period, when your original depreciation does not take care of the replacement of your assets; so it may be that a combination which would not single out the forest industry and give it particular benefits would be the fairest approach to the subject.

THE CHAIRMAN: I will not ask any more questions, because as I said I once argued the other side of the case for some members of the industry, and in the process I naturally thought through all the flaws in the argument that we were using, so I will just drop it.

MR. GRAUER: On that particular point, in our hearings we have had quite a number of representations about the amount of our resources that is going into ownership other than Canadian. In this particular situation you have been dealing with, would that be an inducement for forest ownership to go out of Canadian hands, or would it have any effect at all?

MR. BENTLEY: I would not think so.

THE CHAIRMAN: I would like to ask

how extensive these sales would be in order to obtain a capital appreciation. Would it be the smaller owners of timber limits, by and large, or would it be an extensive practice?

MR. BENTLEY: I would think that was the main reason for a lot of the transactions which have taken place over the last 10 years, both small and large.

THE CHAIRMAN: In discussing labour and so on you conclude the section on labour on page 38 by saying:

"It is hoped that the legislative and public framework within which management and labour deal with each other within our country is such that it does not permit irresponsible actions by a minority on either side of the industrial bargaining table."

I was a little uncertain as to what that sentence meant.

MR. MAHONEY: That sentence obviously covers a wide field. There are certain things taking place in the field of union-management relationship today, both in this province and in other provinces, which many industry representatives, both in this and other industries, feel are not as they should be.

I have reference, for example, to such

things perhaps as picketing and other actions we will not go into here, but that is the sort of thing the industry felt should be brought out in this brief.

It is a large industry; it is unionized very well. Union-management relationships and union-management relationship in future years in industry all through the country is going to be extremely important. That is really what we mean there.

THE CHAIRMAN: Have you any specific suggestions to make?

MR. MAHONEY: Yes, specific suggestions in terms of qualifications or clarification of picketing legislation, and also some more clear cut policy with regard to future government action on right to work legislation.

MR. GUSHUE: What are the means by which you achieve accord or results; the three usual steps of negotiation, conciliation, and arbitration?

MR. MAHONEY: Yes, only we call it conciliation out here. It is the conciliation officer, the conciliation board; it is not an arbitration board.

MR. GUSHUE: That might follow if the conciliation does not work?

MR. MAHONEY: No, we do not have provision for an award which is binding on the parties in conciliation in this province. The

conciliation board is the final step before possible work stoppage action. The award of the board is not binding on the parties unless agreed to before the hearing takes place.

MR. GUSHUE: I take it you rather fear there may be irresponsible action under your present setup?

MR. MAHONEY: No, I do not think that was the point of the paragraph, that we were expecting irresponsible action. We were trying to point out that because the industry occupies such a large percentage of the industrial activity in the province, any union which was certified for the bulk of the industry would be a very large economic force, just as management of the industry is a large economic force. We have stated here that there is, we think, probably more economic power in the hands of the union than any other force on the continent that we can think of, and therefore any irresponsible action on either side could be tremendously costly.

MR. GUSHUE: You deal with your unions individually here?

MR. MAHONEY: In the forest industry on the coast the International Pulp Workers of America, which is certified in the lumber and sawmill operations, mostly is dealt with on a group basis.

MR. GUSHUE: Do the employers group

for that purpose also?

MR. MAHONEY: Yes.

MR. GUSHUE: The association deals with an association of unions?

MR. MAHONEY: With the one union.

The association of the manufacturers deals with the one union. In the pulp and paper industry the association of the employers deals with another union. The interior is handled on the same basis, but it is split up between north and south.

MR. GUSHUE: Perhaps there might be interest in the way in which this is handled in the Newfoundland industry, which is a broad segment of the economy of the province.

There the two big pulp and paper companies and the four big unions -- they are industry unions; they are not craft unions -- have a perpetual setup which is called the woods labour board for voluntary collective bargaining under an independent chairman. It was constituted in 1940 after very turbulent times resulting in the armed protection of properties and so on, and it meets at least three times a year for the purpose of trying to get to know each other.

In it you actually combine your negotiation, conciliation and arbitration, and since 1940 it has worked without any major upset. I think the most valuable feature is

that the union leaders operate together, and they get to know the management leaders intimately.

Has that been known out here at all?

MR. MAHONEY: Not in that sense.

MR. GUSHUE: I was wondering if you might have something of that sort in mind when you gave your final suggestion there of somewhat closer relationships between management and labour.

MR. MAHONEY: I think all industry representatives across the country hope that the relationship between management and labour will become more stable in the future; and if that is the way to do it --

MR. GUSHUE: Do you think that by becoming more intimate it might become more stable?

MR. MAHONEY: My personal viewpoint is that a more intimate relationship will develop more stable relationships.

THE CHAIRMAN: In talking about high transportation costs on page 40 you make the statement:

"Nevertheless, it is important to record here that the statutory Crowsnest Pass grain rates force the railroads

to move export grain at heavy losses."

I would not like this commission to get involved in freight rates. On the other hand, it was stated to us in another city that the railways were not losing money on the Crowsnest pass agreement, and I was wondering who was right, and who knows.

MR. MCDIARMID: I think, Mr. Chairman, the railways have never admitted that they could carry grain at about one-third of their actual out-of-pocket costs. That is the statement which was made before the royal commission. It is very much of concern to us. Our rail freight costs to the Canadian domestic market, which we should have access to, have gone up 100 per cent in the last 3 years, and the net result of course has been that our market in the prairies and in eastern Canada has been cut by about half.

MR. STEWART: Do you recollect whether the railroads provided any significant evidence as to the fact that they could not recover more than one-third of their out-of-pocket costs?

MR. MCDIARMID: I have always assumed that as a matter of record, because the railways have made that statement on a number of occasions.

MR. STEWART: If you know of any reference to such evidence, perhaps we would like to have it.

MR. LUSSIER: Do you know if the freight rate costs for transporting lumber in British Columbia are higher than in the other provinces of Canada?

MR. HOLLIES: On a mileage basis?

MR. LUSSIER: Yes?

MR. HOLLIES: Yes, they are. The maritime rate for lumber on a mileage basis is lower than the coast rates, and the rates in the interior are lower than our rates.

THE CHAIRMAN: You go on to say:

"As things are, the subsidy on export grain is paid in substantial part by the shippers of British Columbia forest products, whose transportation costs are already a serious competitive problem. We urge that an equitable solution be found."

What do you suggest?

MR. HOLLIES: We suggest that the government of Canada subsidize the grain interests by a direct subsidy. Then the railways can raise their rates to at least meet the cost of handling, which eventually will relieve the pressure on other shippers.

THE CHAIRMAN: I would like to ask just one more question on the subject of international trade, to which you refer on page 43, where you state very definitely:

"Therefore, the continued policy of promoting more free international trade -- on a multi-lateral basis -- is the only proper trading policy for Canada to pursue."

I think you would find a great many people would agree with that policy, but what quite a number of people are wondering is what may be its chances of success. Would you have any views on that?

MR. MAHONEY: I think probably this comes under the classification of another pious hope.

THE CHAIRMAN: At least it is pious, and I suppose that is better than some other kinds of hopes.

MR. GUSHUE: I would like to ask a question just on that point, with specific reference to the multilateral basis. Has any consideration been given to the possibility that a bilateral basis as far as Canada is concerned might be a more successful type of approach?

MR. MAHONEY: I would not feel

myself competent to answer that question. I do not think anyone here would feel competent to do that.

MR. GUSHUE: At any rate you would not rule it out if it were a more successful type of approach?

MR. MAHONEY: I would not think so.

MR. GUSHUE: I was just wondering why the reference was to a multilateral basis. It is not a deliberate limitation?

MR. MAHONEY: No, I do not think there was anything deliberate.

MR. STEWART: You estimate with regard to lumber exports to the United States that there should be little appreciable increase in the future. In your annex, exhibit 13, there is evidence of a very substantial increase in the exports of lumber to the United States within the past 8 or 10 years. What were the reasons for that increase, and why would you not be prepared to think it should continue?

MR. MAHONEY: You are speaking of the increase in shipments to the United States?

MR. STEWART: Yes.

MR. HOLLIES: The United States is gradually changing from a net exporter of sawn lumber to a net importer, and that has provided us with an expanding market. It has provided Canada, not only British Columbia, with an expanding market in the United States in lumber.

That position will not change materially, according to the research report that is referred to and that is used in this brief. The United States will never again become an exporting country, and will gradually require a greater percentage of imports to meet their domestic demands.

MR. STEWART: But you do not look for any appreciable increase, as I recollect it.

MR. MAHONEY: Yes, we do. The only thing is that we have anticipated in line with the Stanford report, if you will look at exhibit 14. There was a decline in immediate consumption, and then you will see a gradual decline, and the reason for that is basically the assessment of the large upturn in housing construction over the next few years. Then, although the increase continues, the report reaches the conclusion that the demand for lumber will not increase as much as the population increases and as construction increases, because more and more substitute products will take the place of lumber, since lumber competitively speaking is going to be very high priced.

So we have forecast a large increase in exports to the United States, but it is not going to take place at a constant rate, according to the Stanford report. It will

go downhill possibly for the next 5 to 10 years, and then there will be a gradual increase. That is why we do not project this immediate increase, because we felt it was occasioned by a sudden upturn in housing.

MR. STEWART: And that will slow down?

MR. MAHONEY: That will slow down.

MR. STEWART: On page 22 you say:

"This submission forecasts that the lumber demand from these overseas markets, other than the United Kingdom, will increase at least sufficiently to compensate for any decline in United Kingdom demand."

Would you care to say anything about these other potential markets?

MR. HOLLIES: The others are Australia, South Africa, the West Indies, and many small markets collectively. The indication is that they will still want about the same amount or perhaps increase their imports of lumber from this country.

MR. MAHONEY: I think we base that on a sort of general increase in the standard of living in those countries, which will automatically increase the demand for lumber.

MR. STEWART: In the brief submitted

to us by the province, in the portion dealing with pulp and paper they estimate an increase of 327 per cent in the net value of production between now and 1975. Does that seem to you to be consistent with the market expectations that you have described to us?

MR. YOUNG: I would think so, but without seeing the basis of those figures it would be difficult to give just a "yes" answer. It sounds fairly reasonable.

MR. STEWART: I have in mind the difficulties which you anticipate in the United States market. You would still think you might get this kind of increase in potential production here?

MR. YOUNG: Within the next few years, notwithstanding our concern about competition, the industry is expending large sums of money in new mills, particularly in the kraft pulp line, and I am sure we would not be doing that if we did not expect that, notwithstanding competition, we would be able to sell the products of those mills.

What the figure is, I do not know; that could be right. But I am sure of this, that these developments, these new mills, will be to a large degree dependent not so much on the trees themselves but on the residue from the trees together with improvements in the methods of logging small wood and forest waste. These

are the things that support the profitable operation of the industry for that period.

MR. STEWART: I think it was in reply to Dr. Gushue that you made some comment about the continental approach. Do you feel that is wholly consistent with your dependence upon other markets?

MR. YOUNG: Are you referring to lumber now?

MR. STEWART: Lumber and pulp and paper.

MR. YOUNG: I do not know exactly what you mean by the continental approach.

MR. STEWART: It seems to me that in reply to Dr. Gushue there was some reference to developing a continental approach to the forest industry.

MR. YOUNG: I am sorry; I do not know what that means.

MR. GUSHUE: That was in my question, not in the reply.

MR. STEWART: My last question has to do with research, and I am a little familiar with the general practice in relation to the approach here. You have a number of different agencies engaged in forest research. There is obviously need for co-ordination, but I was wondering, first of all, whether you had thought it through to the extent of which type of agency should conduct which type of research.

Is there an intelligent breakdown as between federal, provincial and the university department of forestry with respect to the type of research which might be carried on?

MR. YOUNG: As far as the pulp and paper section of the forest industry is concerned, research today is getting a great deal of attention, and large sums of money are contributed. The pulp and paper association has a co-operative programme with McGill University and the government. I can get the sums of money they are contributing each year, and that organization is known as the Pulp and Paper Research Institute of Canada. Today that is headed by Dr. Weismeri, an eminent chemist, and all the pulp and paper companies contribute to it.

To that extent at least all their efforts are pretty funnelled along certain channels, and I do not think there is too much divergence there. In addition to that, all the companies maintain their own research laboratories for dealing with their specific problems, both in specific and fundamental research.

MR. STEWART: Suppose you were thinking in terms of more federal funds for forestry research. What type of research would you expect the dominion government to support, and through what type of agency? Would they set up their own forestry research agency?

MR. YOUNG: I think our expansion along this line should be through this combined effort that I have mentioned.

MR. JOHANSON: There are two types of forest products research carried on in British Columbia through the forest products research laboratory at the university. This forestry research is carried on in British Columbia largely by the provincial government. The dominion government has, as you probably know, a very big staff exclusively on forest research, but to date they have not come into British Columbia, either by reason of not being requested or for some other reason. But we hope the federal government will come into the province of British Columbia with an organization that will be engaged in fundamental and practical forestry research as well, in cooperation with the university and with the provincial government. In the other provinces it is a very important agency, which we have not yet been able to interest in British Columbia.

MR. STEWART: And you would like to see them come in and set up their own facilities?

MR. JOHANSON: That is right. The federal government does have an organization here on forest entomology and forest pathology which cooperates very closely with the other agencies, but that is strictly on entomology and pathology.

MR. STEWART: Supposing you had the dominion government come in here. Then you would have your provincial research organization and you would have your university department of forestry. Have you thought about the machinery for co-ordinating and integrating those?

MR. JOHANSON: I do not know what machinery should be set up, but we are hoping that these agencies will all operate and will co-ordinate and integrate their efforts.

MR. BENTLEY: At the moment we have no setup for such a plan.

MR. STEWART: I think it is a problem of respective fields and integration where you have different agencies involved, and this problem is not peculiar to forestry. It is a general problem.

THE CHAIRMAN: Mr. Mahoney, I should have mentioned at the beginning that we will mark your brief Exhibit 80. We are most grateful to the members of the industry for this important and interesting submission. I think all members of this commission are conscious of the importance of the forest products industry in Canada, and as I said during the discussion we are getting a great deal of help from the Canadian Pulp and Paper Association and we expect to hear a lot more about this industry as we proceed with our hearings, both from the association and from the

members of the industry who operate in the central provinces. I think the industry itself is going to be presenting its submissions to us when we are sitting in Ottawa next February and March.

Thank you very much. Now we will have a short recess.

---Recess.

---After recess.

THE CHAIRMAN: Now, gentlemen, if you will come to order the next item is a submission by the Vancouver Housing Association, which we will mark as Exhibit 81.

MR. STRATTON: Mr. Chairman, Dr. Wallace Wilson, our president, asked me to express his apologies for not being able to be here, and has asked me to present this submission in his place. It is fairly short, and I might save time if I read it.

The Vancouver Housing Association, a member agency of the community chest and council of greater Vancouver, is composed of representatives from civic organizations and of private citizens concerned with the improvement of housing conditions in the Vancouver area.

Our association believes that, by and large, the National Housing Act is a fine piece of legislation well designed to assist the development of sound housing policies throughout the country. There appear, however, to be two fields of housing (1) moderate rental housing and (2) slum clearance, in respect to which the existing legislation is inadequate.

Moderate rental housing. Up to the present time, Canada had relied almost exclusively on the readiness of those families who can afford to buy new homes for themselves,

to supply the volume of housing required to meet the increase in population and the obsolescence of existing housing.

The big gap in our building programme today lies in the field of moderate rental family housing. Large numbers of families either lack the capital to build or, owing to the insecurity of their situation, do not wish to sink all their savings in a house. Many of these families could, however, pay the economic rent of a new house provided the financing costs were kept sufficiently low.

If this field could be tapped, a very large demand for housing would be opened up. A substantial increase in the supply of moderate rental housing would also limit the amount of subsidized housing which will be required. If there is an over-all shortage of rental housing, rents of the cheaper accommodation will remain artificially inflated and elimination of substandard housing will only be possible by building directly for the families to be displaced, with the aid of heavy subsidies.

With the closing out of the veterans' housing programme, there are no organizations in Canada building moderate rental housing on any scale today. The insurance companies have dropped out of this field and there appears to be no likelihood of their returning to it. Under section 36 of the National Housing Act, government can

build economical rental housing, but objections can be raised to a public authority, operating with low cost public funds, building houses to rent at levels which may be competitive with private enterprise and it is questionable whether many municipalities will be prepared to initiate housing programmes of this sort on the scale required.

Limited dividend housing corporations operating under section 16 of the National Housing Act could, under suitable auspices, play a valuable role in the rental housing field, since with $3\frac{1}{2}$ per cent loans up to 90 per cent of lending value, repayable over a period up to 50 years, very moderate rents can be achieved. A number of projects on the prairies operated by Gladmer Developments Ltd., where rents run between \$50 and \$60 a month, provide a good example of what can be done. There appears, however, to be no prospect of the initiation of many projects along these lines so long as sponsorship is limited to individuals or groups acting primarily from philanthropic motives, since there is little economic incentive to the building contractor or financier to operate under this section of the act.

If financing under this section was extended to co-operative ownership corporations, a large new source of funds would be opened up. Such corporations cannot at present qualify for financing under this section, even if they comply

with all other requirements, because they are not regarded as providing independent management.

This form of housing, which combines many of the advantages of both ownership and rental housing, has been remarkably successful in Europe in filling the gap between private and public housing programmes. There is no good reason why this type of organization should not perform a useful function in this country also; but if housing co-operatives are to do a real job, more encouragement in the form of low cost financing facilities must be given to them.

There exists in the credit unions an established financing organization operating on an increasing scale throughout the country and capable of sponsoring and giving direction to a co-operative housing programme in local communities. The credit unions have, moreover, a direct interest in promoting housing of this character, since a good proportion of their members have not sufficient income to buy a new home under existing financing facilities.

The extension of special financing facilities to genuine housing co-operatives can be justified on two grounds. First, assistance would be limited under the terms of section 16 to families who, at the time of participation in the housing co-operative, were in the lower income brackets and would not normally be able to build for themselves. Second, the cost of administering

loans to co-operatives operating on a fair scale, would be less than to individual home owners, while the risk of loss would also be less, since every member of the co-operatives would have an interest in protecting his investment should any member fall down on his rental payments.

If, initially, it was desired to restrict control of housing co-operatives to certain recognized sponsoring organizations, it would be possible to restrict tenant's share-holdings to a class of share which carried no voting rights, with the voting shares all held by the sponsoring group.

With the low share equity required, financed if necessary through a credit union, and the relatively low rents which would result from low cost, long term financing, new housing would be brought within the means of a large segment of the population who could not otherwise become home owners.

Co-operative housing is particularly well adapted to the financing of garden and high-rise apartments, which in the larger cities offer economies of construction and land use not open to the individual home buyer.

Co-operative housing corporations, once established, will tend to develop into public utilities, taking a pride in extending their operations as a public service. Working

to long term programmes, their operation will be less affected by changes in economic conditions than private building, and will exercise a stabilizing influence on residential building activity.

We recommend therefore that the financing facilities available under section 16 of the National Housing Act, be extended to co-operative ownership housing organizations provided they comply with the general requirements of this section of the act.

I might add that our association holds no special brief for co-operative housing as such. If there is any better means of providing modern rental housing we are all for it, but in view of the fact that they have been successful elsewhere, and that it might be possible to harness the resources and finances of the credit unions in connection with co-operative housing, we feel this avenue should be explored. But we hope the commission may be able to study the whole situation with regard to the provision of moderate rental housing.

THE CHAIRMAN: Has Central Mortgage and Housing any views on this subject?

MR. STRATTON: 'Hitherto they have taken the attitude that owing to the fact that co-operative ownership corporations do not provide what they consider independent management, they cannot qualify under section 16, even though

they comply with all the other requirements of that section. We have discussed this question with senior officials of Central Mortgage and Housing from time to time, and that has always been the reply to date.

THE CHAIRMAN: I notice that according to the newspapers the minister is in town today. You might catch him.

MR. STRATTON: That is a good point. The next subject is slum clearance and urban redevelopment, which has already been dealt with today to some extent.

Slum clearance and urban redevelopment. With the increased housing supply and the availability of public low rental housing accommodation in our larger cities, it has now become possible for the first time since the end of the war to initiate a slum clearance and urban redevelopment project without creating undue hardship for the tenants of the properties to be demolished, without running into very difficult rehousing problems.

Estimates based on the numbers in existing age groups of the population suggest that, during the next few years, new family formation will temporarily take place at a considerably slower rate than we have experienced hitherto and which may be expected after 1960.

Our association believes, therefore, that the time is now ripe for a large scale attack

on slum conditions as part of a planned programme of urban redevelopment comprising all phases of city growth.

Such a programme, besides removing conditions which are detrimental to the community from all standpoints, whether health, social or economic, will help to maintain construction activity should the private housing demand fall off.

There is one serious obstacle to such a programme which still exists. Under the provisions of section 23 of the National Housing Act, related to slum clearance grants, such grants are at present limited to those areas which are to be redeveloped for residential or public purposes.

In many cities there exist older areas of mixed development with a high proportion of substandard housing which are ripe for redevelopment, but which, owing either to their location or to their limited size, are not suitable for redevelopment for residential purposes. In such cases the best plan will usually be to rehouse the existing inhabitants elsewhere and to assemble the land for industry or commerce. Owing however to the high cost of assembling and clearing small parcels of improved land, such areas may be uneconomic to assemble and redevelop, no less for industrial than for residential purposes, and in default of some assistance from

the federal government, substandard housing in such areas is likely to remain in existence indefinitely.

We recommend therefore that federal grants for slum clearance be extended to areas suitable for redevelopment, irrespective of their ultimate use, provided that (1) their existing use is predominantly residential, (2) the bulk of the housing in the area is substandard and (3) sufficient alternative accommodation is provided to rehouse the persons displaced.

That is our submission.

THE CHAIRMAN: Thank you very much, Mr. Stratton.

MR. STEWART: Do you include Gladmer in your reference to philanthropic organizations?

MR. STRATTON: Not specifically, but I think it might possibly be characterized partly as a philanthropic venture. I may be wrong, but I understand that the revenue from that project is being placed in trust for a philanthropic endeavour in the end. I could be wrong.

MR. STEWART: And you could be right; I am not sure. What rate of interest do the credit unions normally charge?

MR. STRATTON: The rate of interest which they charge or which they receive on their deposits?

MR. STEWART: Which they receive on their deposits?

MR. STRATTON: If a man deposits money with the credit union he normally gets 3 per cent.

MR. STEWART: But if somebody borrows?

MR. STRATTON: If he borrows he pay something like 12 per cent, I understand.

MR. STEWART: One per cent a month?

MR. STRATTON: That is right. I imagine there are variations in those figures, but I think that is fairly common in this part of the world.

MR. GUSHUE: They do not get many borrowers at 12 per cent, do they?

MR. STRATTON: Well, apparently by the way they are increasing their assets, they do.

THE CHAIRMAN: The small loan companies do the same thing.

MR. STRATTON: It is cheaper than borrowing from a commercial loan company.

THE CHAIRMAN: Thank you very much, Mr. Stratton. We are very grateful to you.

THE CHAIRMAN: I understand that Mr. Paterson would like to file a brief on behalf of the Municipal District of West Vancouver, which will be marked Exhibit 82.

MR. PATERSON: Mr. Chairman and members of the commission, I am the planning officer for the municipality of West Vancouver, which is one of the suburbs of this city. I would like to point it out to you on the map. It covers some 32 square miles on the north shore, and is mainly in mountainous territory and forest.

Reeve Richardson of West Vancouver has asked me to present to the commission copies of an economic survey entitled, "Living and Working in West Vancouver", which was prepared for the municipality by two planning consultants of the University of British Columbia, and was published in July of last year.

I would like to say a word or two in explanation of this submission. It is not a brief in the ordinary sense of the word. It was not prepared specifically for this royal commission, but rather at the request of the municipal council of West Vancouver, as the subtitle indicates, as an economic analysis of the community for community planning.

We present this report today because to the best of our knowledge it is one of the most complete studies yet undertaken in Canada of the

economic and physical problems of the small community of the type usually described as a "dormitory" suburb, and we feel it will be of especial interest to the commission because I am sure you have had other representations made to you as to the increasing urbanization in Canada today, and as a corollary to that you will have noticed that the tendency of many people is to not live within the confines of the major city but to spread out to suburban areas.

Although much of this report, including certain recommendations on physical development, is only of interest to the residents of West Vancouver, we do feel that the report will be of special interest to the commission because of some sections which deal with the economic phase of the community and its present ability to meet future demands for services in the face of steadily rising costs accompanied by rapid population growth.

I might also say that this was written in a slightly different context to the conditions under which we are operating today, and that the report came out at a time when there was no discussion on the local scene of metropolitan government or metropolitan planning, questions which are uppermost in our minds at this time. You might say that this was an attempt on the part of the municipality which did not foresee the advent of a metropolitan organization in the near future, and did make some attempt at an analysis of its

economy to see how it might carry on completely under its own steam.

We do not offer this brief, therefore, in an attempt to supply concrete recommendations to the commission, but rather in the hope that some of the findings of this report will supplement other information supplied to the commission by other cities or districts in the metropolitan areas.

That is the end of my submission, gentlemen.

THE CHAIRMAN: Thank you very much, Mr. Paterson; we are grateful to you and we will study the brief which you have left with us.

At 12:50 p.m. the commission adjourned.

--- The commission resumed
at 2:30 p.m.

THE CHAIRMAN: Well, gentlemen, shall we come to order? The next submission is to be made by the British Columbia division of the Community Planning Association, who were to have appeared this morning. We are sorry if we have inconvenienced you.

MR. LANE: Not at all.

THE CHAIRMAN: We will mark your submission Exhibit 83.

MR. LANE: I believe I should make a very few brief comments on the nature of this association. It is composed entirely of private citizens and in fact laymen in the realm of town and country planning.

The people concerned in the association have one common interest, namely the development of our province and this country in a manner commensurate with good planning practice, both town and regional planning-wise. The association, as I mentioned, is nation-wide. Sir Brian Dunfield of Newfoundland is the national chairman, and I happen at present to be the provincial chairman of the association. It is proposed that the association in its various divisions will present small briefs on various aspects of planning to you gentlemen, and in the case of British Columbia we have chosen a topic which has come to our attention perhaps more frequently than any other,

the conflict between the use of land for agriculture on the one hand and for industry and housing on the other.

Much of the area of British Columbia topographically and in the north climatically is not suited to agriculture. We have an average of one cultivated acre per person in British Columbia. Our population has increased remarkably but our area of cultivated land has not expanded at the same rate. Dr. J. Lewis Robinson, department of geology and geography, University of British Columbia, in speaking at a community planning conference, pointed out that in 1900 British Columbia had a population of 170,000 persons and had 500,000 acres of cultivated land, about 3 acres per person. Today we have a population of about 1,500,000 and about 1,250,000 cultivated acres -- about 1 acre per person.

From what we hear of the report in Victoria, our population may be 2,278,000 by 1975, and I think the economic development of British Columbia will at least pose a serious problem in the use of land presently given over to agricultural purposes.

There is, of course, in the province quite a bit of potentially arable land, but much of it is far from the principal markets and quite a bit is not economic from a farming point of view.

It is true that we are not using all of our arable land. Estimates state that we have

from 7 million to 9 million acres of arable land in British Columbia -- but this information, gathered from official sources, does not tell us where the land is located. In truth, most of it is far away from markets in central British Columbia and, although it may be classed as arable, much of it is not economic. The rate of bringing arable land under new cultivation is slow; while some of the older farming areas are actually being taken out of production. In the urban areas a considerable amount of this cultivated land is being turned over to residential and in some cases industrial use.

Residential settlement on the excellent agricultural land of the Fraser valley delta is continuing. Every year, 100 to 200 acres of dairy or truck garden land is withdrawn from production on Lulu island alone. Already, Vancouver's agricultural hinterland in the Fraser valley cannot supply sufficient food for the urban metropolis, and yet we continue to allow agricultural land to go out of production, and therefore increase our food costs. There can be little said in favour of this trend, in terms of the space needed for productive commercial or industrial workers, since large empty areas of non-productive, coarse glacial soils still exist in greater Vancouver.

In other words, we are using as agricultural land the sandy uplands which surround the city, which could be used for housing and to a

smaller degree for industry. The situation prevails throughout the province. It certainly prevails in the far end of the Fraser valley, around the city of Chilliwack and in the Saanich peninsula on the south end of Vancouver island. In the Okanagan the same situation appears. Penticton, for instance, is utilizing very expensive and valuable orchard lands for residential purposes principally.

We submit that unless the urban expansion of our communities is more carefully guided during the next 20 years, the result will be a needless conflict for the use of land; and in this needless conflict we submit that only the country can lose.

Virtually all new agricultural acreage is in the central part of the province, where the soils are poor, where the climate is more uncertain and transportation costs are high. On the other hand the acreage going out of production is some of the best soil in the province, where the climate is good and close to our principal markets.

I would like to reiterate that this problem of using up agricultural land is foremost in the minds of people in many of the communities of our province. I have had the pleasure of visiting many of them in my capacity as chairman of this division of the association, and of all the topics we have

discussed in our various conferences this particular one aroused the most interest in the various regions of the province.

Unfortunately we have not, in British Columbia at least, more than a sampling of the essential soil surveys. In other words we do not know what our land resource consists of in the central and northern parts of the province. In 1952 a land utilization survey by the provincial government, which was classifying land for future settlement, was abolished as an economy measure. We submit that was unfortunate.

Greater Vancouver is, therefore, not using its land properly. On a regional basis, housing should go on non-productive land, leaving where possible the good soil to feed the growing population.

On a smaller scale one can see the same trend appearing around Chilliwack, near the eastern end of the lower Fraser valley, and in Saanich peninsula, north of Victoria. Urban pressure on the land is resulting in farm land becoming residential area, and large dairy farms are being broken up into smaller, and frequently less efficient farms. In the Okanagan valley the same trends are also apparent. The conflict in land use is already quite apparent in Penticton. As that city expands into the upper benches, fruit farms are subdivided and agricultural land becomes non-productive. Other centres such as

Kelowna and Kamloops are rapidly encroaching upon agricultural land -- and yet these same fruit lands are basic to the economy of the community.

In the Saanich peninsular these same problems of conflicting land use are already upon us. Vancouver island has very little good agricultural land -- only about one-fifth of the total area of the southeastern strip of the island is classed as arable. One of the largest blocks of good land is in the Saanich peninsula. This region is also a desirable place for residential settlement. Although population has increased steadily, arable land is limited. Already agriculture, in this summer drought region, is also competing with residential users for the limited supplies of ground water.

On southern Vancouver island, the lower mainland region, and the Okanagan valley -- British Columbia's three most intensively used agricultural areas -- we have permitted community growth to expand haphazardly onto our best accessible agricultural lands. Virtually all new agricultural acreage is in the central part of the province, where soils are poorer, climate is more uncertain and transportation costs are high. On the other hand, the acreage going out of production is on some of the best soils of the province, with a good climate and near

to markets.

If we want people to move into the potential agricultural areas of central and northern British Columbia, we first must know more about the land. We cannot afford to waste settlers and their time and capital by placing them on poor land, as has happened so often in Canada before world war II. And yet, what fundamental planning are we doing for agricultural settlement in British Columbia? As yet we do not have more than a sampling of essential fundamental soil surveys. And in 1952 the land utilization survey which was classifying land for future settlement, was abolished as an economy measure.

This trend toward declining agricultural opportunities near our cities might be excused if all of the available residential land in southwestern British Columbia were already occupied. It is not, however. On Saanich peninsula, and in the lower Fraser valley we have a variety of soils, owing to a rather complex geological history of emergence since the glacial age. It would seem desirable therefore, in whatever planning is done for the region, that the good soils be saved for agriculture and the poor soils be used for residential, or other purposes.

Southern British Columbia has reached the stage where there are alternative

demands for land area. In the Okanagan it is apparent that already residential uses have pushed back the orchard areas. On Lulu island good dairy farms are being subdivided into less productive small holdings and residences. Such encroachment is possible for a time, as long as there is other land available further back which will produce more crops. However, geographically neither the Okanagan, lower Fraser valley or Saanich have unlimited agricultural hinterlands. Every new residential subdivision will take land out of production -- land upon which many residences actually are dependent, in terms of the owner's livelihood. Obviously, we cannot have our cake and eat it too. There is a limit to the population which the agricultural resources of this region can support -- these limits are environmental. Unless we wish to continue to pay more and more for food as we import it from farther and farther away, we must implement regional land-use planning.

Agricultural land lying close to the larger urban centres possesses values over and beyond the purely monetary returns from it. It assures the community of a supply of fresh milk and vegetables at low transportation costs. In an emergency a supply of foodstuffs not dependent on vulnerable lines of transportation may be a valuable safeguard. An economy based largely on the extractive industries

and the processing of their products is more vulnerable to changes in economic conditions than one which also has a foot firmly planted in the soil.

The report of Mr. Justice Klein, of the British Columbia royal commission on milk, discusses in some detail this rapid loss of agricultural land, and at page 18 of the report of the commission I quote the following:

"Nature has endowed this province with ample land which is completely useless and unproductive from an agricultural point of view but which is entirely adequate and valuable for the building of factories and houses and there is plenty of that land available in the immediate vicinity of Vancouver. Thus it is distressing from an economic point of view to see some of the finest agricultural land in the world being used for low cost housing development when there are equally good building-sites equally close at hand."

Perhaps more important still, agricultural land may serve as desirable open space or green belt to break the continuous urban sprawl which characterizes too many of our metropolitan

communities. That is a principle of town planning on which I do not think I need to elaborate. It is generally conceded that a green belt, so called, near our larger cities is a desirable thing. Such open spaces, unlike our public parks, cost the community nothing to maintain, but bring the amenities of countryside within easy reach of the town dweller.

In conclusion we submit with great respect that there are a number of measures which may be taken to preserve agricultural land:

(1) First, and I think the most important, the introduction of a system of agricultural zoning through minimum acreage subdivision requirements would tend to stabilize land uses and encourage investment in permanent improvements to the land.

Zoning might follow a system of land classification based on soil characteristics as is done in certain counties in California.

Farmers would be encouraged to accept such zoning provisions, if agricultural land, zoned as such, was relieved of some of the tax burden at present imposed on it. It must be realized that the assessment of agricultural land presently considers its, as it were, speculative value for other uses, and that is one of the chief problems in preventing agricultural land from remaining in farming use. We have come to

accept the principle that residential, commercial and industrial land should be zoned to protect it from encroachment, but few communities have bothered to protect farm land. Although zoning would prevent the subdivision of certain agricultural land, the farm owners would simply be on a par with the city homeowners who cannot at random tear down houses and build, say, stores. We believe, and people have accepted, that individual rights must operate within a pattern designed to benefit the broader interests of the community, and I think that is the nub of the proposition.

(2) High taxation of agricultural land, resulting very largely from the necessity of financing costly urban services for adjacent residential developments, puts an unwarranted burden on the farmer and makes it difficult for him to resist attractive offers from subdivision.

Recent studies in the Fraser valley indicate that agricultural land pays taxes at a rate considerably in excess of the value of the services rendered to it, the school tax representing a particularly heavy burden. Heavy taxation, by depressing the price of agricultural land below its true value, also reduces the differential in price between good and poor land and encourages the use of the land which is cheapest to develop, irrespective of its agricultural quality.

The system of assessing and taxing agricultural land should, it is submitted, be reviewed and the weight of taxation related directly to the benefits actually received by the land in terms of roads and other services, the farmer's house being assessed separately on a residential unit.

Some of the land may then be saved from residential subdivision by maintaining low assessment rates as long as the land remains in sound agricultural production.

(3) Where, owing to increments in value brought about by growing urbanization, it appears likely to be difficult to maintain an agricultural zoning classification, the community might consider acquiring strategically located properties before values have risen too far and leasing them for farming purposes. Of course they would only consider this as a step toward achieving a green belt, as they are endeavouring to do around the city of Ottawa, to carry out the Ottawa plan.

(4) More effective controls are required over new land development schemes to prevent premature subdivision. Sporadic, speculative development often takes large areas of land out of effective cultivation many years before their actual need as sites for housing or other urban uses.

(5) A tremendous waste of land, and of

the services associated with urban land use, has followed from our current practice of allowing excessively widespread communities to grow up; of course by that I mean diffused in the sense of a few houses here and a few shops there, and perhaps a factory over there; from the unnecessary widths of street required by some municipalities and from redundant lanes. This inefficiency can be overcome by the recognition on the part of municipal governments of contemporary town planning techniques.

It would appear that we have at hand the planning techniques which would in effect prevent most of the problems which have arisen. The great difficulty is in putting these things into effect, and it is submitted that because the municipal unit is charged with this duty, it is virtually impossible to expect that a region will be properly guided because of the piecemeal and somewhat arbitrary boundaries which our municipal areas have.

(6) The breaking down of large farms into uneconomic agricultural units has been a further factor in reducing productivity. The Veterans Land Act, by establishing subdivisions with a minimum lot size too big for convenient residential occupancy yet too small for effective farming, has contributed to this situation. A considerable amount of private land has also been subdivided into holdings which are probably

below an economic size in times of low agricultural prices. Zoning limitations on minimum lot sizes, related to the type of agriculture suitable for the area, would assist in preventing the abandonment or neglect of marginal farms.

You will perhaps recall that after the first world war, and certainly after the second world war, veterans were put on the land, and I think it was a sound idea. The difficulty is that they were given plots of land which were supposed to be operated as truck gardens, I suppose, while in fact the veterans concerned usually got jobs in mines or mills or industry, and this relatively uneconomic unit, perhaps a quarter of an acre or something like that, would actually be virtually abandoned apart from a garden of some sort.

(7) If lands unfit for agriculture but suitable for residential and other building purposes were serviced in anticipation of requirement, the developer would be attracted to such land, thus leaving the farm land in production. I believe that point came up this morning in the submission of the city of Vancouver; if not that, then an allied point, that some of our problems at least would be overcome if the city or some level of government would anticipate the requirements of the various aspects of our economic life, the needs for residences, the needs for industry and so forth. Municipalities should take

positive steps to clear and service such land, through section 36 of the National Housing Act or through their own resources.

(8) Few, if any, of the measures proposed will be put into effect if they have to depend for their adoption on the decisions of individual suburban municipalities acting independently of each other, since the apparent interest of each individual municipality will not necessarily coincide with that of the area as a whole. Even when these interests do coincide, the required measures will often not be put into effect owing to the opposition of local and usually vocal vested interests.

The desirability of planning on a metropolitan or regional basis requires no elaboration since it is obvious that few major urban services can be planned effectively on a piecemeal basis. Past experience has taught, however, that it is too much to expect a number of autonomous municipalities, jealous of their own rights and interest, to co-operate effectively in executing a metropolitan or regional plan.

Unless, therefore, the provincial government is prepared to step in at the request of a reasonable proportion of municipalities or voters and set up a supramunicipal authority for the administration of the principal urban services in metropolitan or regional areas, any really effective planning for the best use of our land

resource is very unlikely to be achieved.

It is not suggested that all agricultural land should be withheld indefinitely from residential or other uses. We recognize that people have to sleep and work, as well as to eat. Our submission is simply that while there is other land available for these functions, agricultural land should not be sacrificed. What is required is effective planning, based on accurate knowledge of our land resources, through soil surveys and the like, and our community needs through surveys of what industry will require and what housing will require. It is simply a matter of using the right land for the right purpose.

THE CHAIRMAN: Thank you very much.

MR. STEWART: I notice that on page 6 you have reference to a supramunicipal authority to implement this type of regional planning. Do you know of any precedent for this, or have you thought out the type of machinery you would need?

MR. LANE: In a sense we have a precedent in the lower mainland region of British Columbia. We have a board composed of representatives of all the member municipalities of that region, but it is in a sense a large town planning commission; it can only make recommendations.

I think on an interim basis that is a good idea, but I feel that we have now reached the point where the situation has become, we will say, desperate, and I feel that the region as a

whole must have some sort of co-ordinated control, not just by advice, but by force of law with the approval of at least the majority of the member municipalities of the region.

MR. STEWART: Do you see any prospect of getting that?

MR. LANE: I think the prospect is nearer now than perhaps most of us realize, and it is not due to any form of altruism but due, I think, to the fact that the situation is growing desperate. It will either be handled to some extent on a metropolitan basis, like in greater Toronto, or alternatively on a regional basis as in the lower mainland of British Columbia.

There is, of course, the precedent in county government with which we are all familiar, not in British Columbia, mind you, but in other parts of Canada and certainly in parts of the United States.

MR. STEWART: How far would your regional organization of that kind have to extend its jurisdiction in order to cover everything?

MR. LANE: I am afraid it would have to extend to the extent of the major services; highways, and so on. I do not see how it could avoid being the authority for zoning --

MR. STEWART: But I mean

geographically; what have you in mind?

MR. LANE: In the case of the lower Fraser valley there is very little problem; we have a border on one side and 5,000 foot mountains on the other, with the sea to our west and Hell's Gate to the east. In other parts of Canada I presume it would have to be the result of some sort of survey to find out what the actual region was and how far it extended. It would perhaps be in the nature of several hundred square miles.

MR. STEWART: Apparently your experience has been that important productive agricultural land has been taken up for urban purposes, whereas there is poorer glacial agricultural land suitable for urban purposes not being taken up. I would expect that the prices of those lands would differ, that good agricultural land close to the city should be higher priced. How do you explain this?

MR. LANE: The explanation is fairly simple. The agricultural land is already cleared. It has a certain number of roads in it. It is usually in some form of municipal government. In other words, it is a relatively simple thing to subdivide a farm. It is a little more difficult, but not too much more, to subdivide some of these sandy uplands, and in fact we are doing just that on the north shore of Burrard inlet here. These

sandy uplands are being cleared and serviced, but there is always a temptation to use up the adjacent farm land, and the trouble is that in British Columbia we have so very little of it that in our opinion it poses a very serious problem.

THE CHAIRMAN: Thank you very much, Mr. Lane.

THE CHAIRMAN: The next submission is by the Technical Committee for Metropolitan Highway Planning, to be presented by Mr. McCallum, and we will mark this brief Exhibit 84.

MR. OLIVER: Mr. Chairman, first of all I must thank you for giving us your time and meeting our convenience this afternoon, and also I present the apologies of our chairman, Mr. McCallum. He is chief engineer in Victoria, and he had other commitments which made it impossible for him to come today. Accordingly the committee is represented by myself as a member and by Mr. Farry, who is secretary of the committee.

The committee was established in 1952 by the then minister of public works of the provincial government, under the chairmanship of the chief engineer of the department of highways, and includes the city engineers of Victoria, New Westminster, and the corporation of Burnaby. These are the three municipalities which are in what is known as Burrard peninsula.

That committee was charged with studying the necessity for additional highway access in that area; the type and location of the arterial highways; the approximate construction costs, and the required date of construction based on estimated traffic growth. It was also given the right to add to its numbers such technical officers as it thought necessary; and you will see on the flyleaf of the brief the present

composition of the committee, including representatives of the engineering department of the provincial government, of the city of Vancouver, the city of New Westminster, the corporation of Burnaby, the municipality of Richmond, the municipality of Surrey, the lower mainland regional planning board, and the municipality of Delta, together with the planning departments of Vancouver, Burnaby, and as I said, the lower mainland regional planning board.

I should like to add, Mr. Chairman, that in presenting this brief, this committee is doing so on its own. It has not been presented to the various constituent governments, and therefore represents our own opinion or, in radio parlance, it does not represent the opinion of our sponsors. I would like to make that clear.

We have endeavoured to approach the problem as a problem, without any regard to political boundaries, although we all represent local authorities and the provincial government.

The study has already produced two reports, which I believe have been forwarded to your staff; one on the crossings of the main Fraser river, which has been presented to the provincial government and which they are now studying, and one by a committee of a slightly

different composition studying the crossings of Burrard inlet. That has been presented to the provincial government, and they have made a decision as to the next crossing of the inlet.

The committee has started on its third and largest task; that is, the study of traffic movement in the Burrard peninsula itself. Surveys have been carried out, and the results are being analyzed. Unfortunately it will be a year before the committee will be a position to make definite recommendations along the lines indicated, so this report must be read in the light of that fact. We do not have all our data analyzed, and have presented just a short brief with as much information as we could get in the time available.

The picture, generally speaking, is that the traffic growth in the area has more than doubled since the end of the war. In total there are approximately 460,000 motor vehicle trips and 275,000 mass transit trips daily into and out of the internal area, giving a total of something over 1 million person trips per day. Of these person trips, 76 per cent were made by motor vehicles and only 26 per cent by public transit.

To carry this traffic there are at present 337 miles of arterial highways, those we consider to be major highways and not local

streets, constituting 928 traffic lane miles in existence; and we feel that this is barely meeting the present demand. There is a slight reservoir in areas where parking is permitted, but undoubtedly that will be done away with very shortly.

In the development of this system the provincial government and the municipalities in the area have spent \$39 million in the past 9 years to provide for the increase in traffic. This includes the capital cost of new construction for highways and bridge structures, as well as widening and surfacing existing arterial roads.

At this stage in the development of the area a large proportion of the street allowances provided for arterial roads have now been developed to their full width. Thus further expansion for traffic in some areas will require new arterial routes for which no street allowance has been provided. This will necessitate the provision of a new type of arterial highway having limited access to the street and properties adjacent.

The need for this new type of facility is borne out by the forecast prepared for the Burrard inlet and Fraser river crossings, the two reports I mentioned earlier. On the

basis of the projections made for these reports, traffic may be expected to increase about 200 per cent in the next 20 years on the assumption of a 100 per cent increase in population and a 50 per cent increase in the motor vehicle ownership to population ratio. That will bring us in line with the larger urban areas to the south of us on the Pacific coast.

On the basis of this estimate, the number of motor vehicle trips would increase from 460,000 to 1,380,000 trips per day during the next 20 years. While various solutions to the urban transportation problem have been indicated in the brief, there seems to be no indication that the traffic and development trends will change materially in the next 20 year period. The metropolitan area has at present only one-half the vehicle to population ratio of United States cities on the Pacific coast, so that if our travel pattern tends to follow theirs, as it has in the past, similar situations in traffic growth may be experienced here within the 20 year forecast period.

While alternatives, such as the mass movement of persons by mass transit of a rapid transit service type, or the reorganization of the metropolitan area into balanced communities in terms of the employment to population ratios have been suggested as a means of reducing the motor vehicle traffic problem,

these alternatives as yet have to be tried anywhere and thus far in our studies their applicability has not been tested.

At this stage in the study the committee feel that sufficient data is not yet available to give a complete answer to this problem. However, it would seem obvious that arterial highways of the limited access type will be required. These limited access facilities may be of different standards of design for access control, size and interchange arrangements, depending on the traffic to be accommodated.

The internal area at present contains 170 square miles with a population of 528,000 persons, giving an average gross density of approximately 5 persons per acre. With the population expected to increase to 900,000 by 1976, with 1,380,000 motor vehicle trips anticipated, the need for an expressway type of network would seem obvious.

Eight hundred and twenty traffic-lane miles are used at present to accommodate the major traffic movements in the internal area, and there are a total of 460,000 vehicle trips per day. If it can be said that the traffic-lane miles required are proportionate to the total daily traffic, then on this basis approximately 2,460 traffic-lane miles would be required by 1976. Subtracting the present traffic-

lane miles available from the future estimate, the net increase required would be 1,532 traffic-lane miles, and the estimated cost of providing that extra capacity is \$300 million in the 20 year period. In place of detailed studies we have used as our basis in estimating costs the costs produced by the Clay committee in the United States in a report to the President dealing with the future highway problems in that country. That is given in one of the appendices to the report.

From the reports of the various municipalities and the provincial government on their respective capital costs for arterial highways in the period 1947 - 1955, a total of \$39 million has been spent in accommodating the traffic increase. This figure gives an average of \$4,300,000 per year. While it is not within the committee's terms of reference to consider how arterial highways in the metropolitan area should be financed, it would seem obvious that the rate of capital expenditure on highways in this area will have to be accelerated and that some reorganization in the methods of financing arterial highways within metropolitan areas will have to be made if the facilities required are to be built.

The commission will realize that this brief has been prepared in considerable haste and that much of the material the committee

would like to present will not be available until the metropolitan highway planning study is completed next year. We trust, however, that we have been able to give some indication of the magnitude of the problem, if not a solution to it.

THE CHAIRMAN: Thank you very much.

I suppose if the forecasts of the automobile companies, which we have not yet received but which we read about, are implemented, this situation is going to get progressively worse?

MR. FARRY: We would feel that we have been conservative in our estimates of the increases in traffic.

MR. GRAUER: This figure of \$300 million; is that in addition to the figures which were mentioned in the submission of the city of Vancouver?

MR. FARRY: No, they are not, in this regard. In the city brief, which I believe is the only municipal brief you have from our area, we have a figure of \$186 million for public works. That includes an amount of \$55 million, which comes out of this \$300 million. In other words, \$55 million is the amount which would have to be spent within the city of Vancouver of this \$300 million, and that has been included in the city's brief as a possible city expenditure, and that is explained in their brief.

MR. GRAUER: Am I right in believing

that the city's brief thought the senior governments should share in providing that \$55 million, in part if not entirely, because these are the streets that take traffic from outside the city more than most streets?

MR. OLIVER: Changing my hat and speaking as the city engineer of Vancouver, the answer would be yes.

MR. GRAUER: Then by the same token I suppose you anticipate that the remainder of the \$300 million would be financed in the same way. Is that the representation?

MR. FARRY: The terms of reference of the committee specifically left out the question of financing; but the existing method of financing this type of road, with the exception of the city of Vancouver and the city of New Westminster, is that the provincial government would bear the entire cost. That is the present policy.

MR. GRAUER: If that policy were continued there would not be any financial problem with the exception of the \$55 million?

MR. OLIVER: And whatever is spent in the city of New Westminster.

THE CHAIRMAN: Thank you very much, Mr. Oliver; we are grateful for this submission.

THE CHAIRMAN: Now we have the submission of the British Columbia Teachers' Federation, which we will mark as Exhibit 85.

MR. OVANS: Mr. Phillipson had hoped to be present, but unfortunately he is from out of town and his plane was grounded in Comox. I have with me Mr. Boyd, the vice president of the federation.

I might explain that our brief is a general statement, for two reasons. In the first place, as you will appreciate education is a provincial responsibility under the British North America Act, and any specific recommendations in connection with the school system we habitually make to the provincial authorities. In the second place the whole question of school finance in Canada in terms of projected costs has been pretty well covered in a recent publication of Canadian School Trustees Association, which we intend to file with the commission.

THE CHAIRMAN: Thank you.

MR. OVANS: If I may present the brief, we understand that the main concern of the royal commission on Canada's economic prospects is to fashion a picture of what economic status Canada will hold 25 years hence and that in particular it will seek to find out what needs exist for the full development of the natural resources of the country.

Our contention is that education

has a responsible part to play in promoting the future of the country and that thought should be given to the needs of the public schools over the next 25 years along with more obvious economic needs. We see it as no accident that in a country blessed with rich natural resources but with a poor standard of general education the people suffer a low standard of living and conversely that in a country rather poor in natural resources but with foresight enough to have developed a good educational system the people enjoy a relatively high standard of living. At the two extremes some of the South American republics and Denmark are cases in point. Consider also the rapid material progress made in Venezuela since that country reformed its school system. The full development of Canada's economic resources in the next 25 years will depend in no small measure on the full development of the provincial educational programmes.

There is in this province an organization called the British Columbia natural resources conference. Proceedings of this group over the past 7 years of its existence usually make some reference to the importance of people as a natural resource. Witness the following questions:

"(1) Because it is obvious
that people must shape the destiny

of our resource utilization, it is important to realize the factors that make them suitable to administer such important matters. Fundamentally, the human factor takes its course as it is molded and directed in youth. Youth, then, may well be termed the tenth resource and the most important resource of all."

"(2) A conference on the resources of British Columbia will, of course, devote considerable attention to the human resources of the province. The efficiency with which we develop our natural resources will depend at any time upon the adequacy of our supply of leaders and skilled or semi-skilled workers, and also upon the ability and imagination of our industrial leadership, the quality and service of our workers and the degree to which the people of the province cooperate in the various industrial enterprises in order to make the best possible use of the land and its resources."

"(3) Population itself is a natural resource. It is a biological resource, capable of replenishing and

increasing its numbers. Like all natural resources it can be squandered or husbanded."

We ask that this commission recognize along with the British Columbia natural resources conference that people are one of our natural resources and accept the implications that arise out of this recognition that:

(1) A basic factor in the developing and molding of youth is education.

(2) Leadership, skill, imagination, resourcefulness and co-operation may all be fostered by a good educational programme.

(3) The natural resource of people stands to be squandered rather than husbanded unless it is supported by a good educational system.

The brief of the British Columbia government to this commission, according to press reports, makes predictions as to population growth in this province and estimates the cost of new school facilities occasioned by that population increase. There would be no point in our attempting to duplicate these statistics.

We wish to point out, however, that over and above new costs for school operation and school buildings necessitated by inevitably higher enrolments there is the problem that spending on public schools is not at the present time on a high enough level.

Many classes are far too large for

effective teaching.

There are far too many unqualified or underqualified teachers employed in the school system. Higher standards of teacher education are universally accepted as being desirable and even necessary.

Although British Columbia has an outstanding record in this respect, there are elsewhere in Canada too many pupil drop-outs from secondary schools because there are not enough curricular offerings to meet the needs of the non-academic student.

These are all cost factors that should be met in planning for Canada's development.

Then, too, there are the problems created by the trend toward automation in industry. As Walter Reuther, president, Congress of Industrial Organization, points out:

"Automation holds out the promise of vast improvement in living conditions, in increased leisure for workers and in greatly increased economic strength. It likewise promises the elimination of routine, repetitive jobs. But the widespread introduction of automation within the coming decade or two will present serious economic and social problems,

involving dislocations of the labour force, geographical shifts of industry, labour displacement, changing the skills of workers and the need for increases in consumer buying power for rapidly growing markets."

For education, automation has the following implications:

(1) Education for the proper use of leisure time becomes more important than ever before. More attention to the arts might well be given within the school system so that Canada may have a cultural development to accompany its economic development.

(2) More young people will have to be trained for the more specialized skills required to operate complicated electronic devices. Highly specialized skills can be developed only if there is a background of a good general education.

(3) One of the aims of education will have to be to prepare young people for adaptability and to so equip them that they can make an easy transition from one skill to another to meet changing demands of industry.

(4) A system of part time employment with provision for on the job training combined with instruction at school, as is known

in England as part of an apprenticeship system, might well be introduced.

(5) At the advanced education level, universities will have to produce more and more specialists capable of working in the areas of research and production. Furthermore, a growth in technology will be accompanied by a growth of our social institutions, our transportation and communication systems and our government structure. These developments will create demands for more and more people with a sound liberal education.

We must avoid overemphasizing the production of technical specialists, to the detriment of that broad general education in the humanities which is most basic to the successful functioning of a modern democracy.

In 1950 there were 34 professional persons per 1,000 population as compared with 18 in 1910 and 2 in 1870. In 1950, 20 per cent of all professional persons were employed in science and technology as compared with 11 per cent in 1910 and $3\frac{1}{2}$ per cent in 1870. The coming quarter century will undoubtedly change these proportions drastically upward if the universities can meet the demands created by the developments of technology. And let it not be forgotten that universities get their students from the public school system. Incidentally, these are United States statistics, but we believe they would hold

fairly true for Canada.

The projected costs of providing a sound educational system over the next 25 year period would be frightening if it were not for the fact that production represents wealth. Increasing productivity brought about by the advances of automation will easily support a sound educational system if some way can be found of tapping that increased wealth. It cannot be left to the municipalities and the provincial governments alone to find the money for education. Their sources of revenue are too restricted. The tax base for school revenues should be broadened for all provinces. Federal assistance for education would widen the field of support. The federal government must either through its taxation agreements with the provinces ensure that the provinces will have enough money to provide adequate social services including education or make direct grants in aid of education.

In this connection we should like to file with the commission a copy of the LaZerte report on school finance in Canada, 1955, which details the need for federal aid for education. In so doing, however, we wish to go on record as not necessarily agreeing with the recommendations in this report either as to the amount of federal aid suggested or as to the basis of paying federal grants. We do not see how the federal

government could make equalization grants, as suggested by Dr. LaZerte, without infringing upon provincial control of education. Our recommendation would be that federal aid be given on a flat per pupil in average daily attendance basis paid directly to the provincial governments for the support of the public school system within the province. The equalization principle should be taken care of, we feel, through general federal-provincial taxation arrangements.

All of which is respectfully submitted.

THE CHAIRMAN: Thank you, Mr. Ovans.

MR. GUSHUE: I think we can sum up your report very briefly by saying that much more effort in education will be needed; and to achieve that effort much more finances will be required, from whatever source they may come, and you point to some of these sources from which they might come.

Is that a fair summary?

MR. OVANS: Yes. This is a national commission tackling a national problem, but we feel there is and must be national concern over education; that along with the proper utilization of our resources there must go provision for a sound educational system. While we do not wish to change the present day picture with

education as a provincial responsibility, we feel it important that the federal government recognize its natural interest in education and its natural concern over education by making it possible for the provincial governments and the municipalities adequately to support a sound educational system.

In other words a sound educational system is in the national interest even though the responsibility for that system lies with the provinces. That national concern and interest in education must be realized through the federal government seeing to it that there is adequate financial support within the province for a sound educational system.

THE CHAIRMAN: I do not disagree with anything you have said at all about the need for increased emphasis on education, but I must say that I wonder how the federal government is going to do all the things that people across the country expect it to do. I think there has been only one submission to this commission so far that did not suggest some form or other of expenditure of federal funds.

The federal budget is not unlimited, and if you deduct expenditures on defence and the servicing of the debt, and expenditures on various social and welfare programmes which I expect the people of the country would want continued, you finally get down to a not very

large pot; and how it is to be divided up so everybody is going to be satisfied, I am not too clear.

MR. OVANS: We do not pretend to have the answers, either, but our purpose in being here is to see to it, if we can, that the needs of education are not being overlooked. We do recognize that there are many demands on the federal treasury, but we still feel that a very important need for the future of the country is a sound educational system, and the needs of that system must not be lost sight of in the over-all picture.

What specific arrangements will be produced to take care of those needs, we do not know; but we feel the need should be met. As we see it, with the increased development of the country economically there will be new wealth produced, and as we see it the federal government is in the best position to tap that wealth because of its broader taxation basis. Whatever tax arrangements are arrived at, by whatever manner, we feel the situation must be such that the provinces are left with sufficient finances to meet this need.

MR. STEWART: Just to go a little further on that question, assuming that the federal government is in a position to distribute moneys to the provinces you are suggesting that there should be a direct grant for education on a

flat per pupil average daily attendance basis.

When you look at it in terms of grants for education, grants for health, grants for roads, grants for everything else, does that really add up; or would it be better to give the province a sum of money and say, "It is up to you to do what you think best"?

MR. OVANS: Our brief says "either/or". We say either the federal government must so arrange its taxation policies that the provinces will be in a position to support a sound educational system through its over-all arrangements without direct grants in aid or anything; but if there are to be direct grants in aid of education, then we feel those grants should be distributed on the basis of a per pupil average daily attendance, because that is the only way we see of doing it that would not involve federal control.

MR. STEWART: But you would be satisfied with unconditional grants to the provinces?

MR. OVANS: Well, as I say it is an either/or proposition.

THE CHAIRMAN: As long as enough money is spent on education you would be satisfied?

MR. OVANS: If the provinces have enough money, then I think the educational people within the province will be in a sound position to see to it that enough money is spent on

education.

As far as the present government of British Columbia is concerned, we think it is making a very commendable effort in respect of the educational services, and as long as the provincial government has the necessary revenues we do not see any difficulty whatever in persuading them to allocate a fair proportion of those revenues to the support of education.

THE CHAIRMAN: As I remember the provincial brief which was presented to us on Monday, they are planning for a university enrolment within the next 20 years of 26,000 students, and they are planning or expecting to spend \$60 million on the university or universities in that period. I noticed that some people on the commission who are interested in universities were quite interested when those proposals were made.

MR. STEWART: I do not want to get into the field of educational philosophy, particularly, but I had a question relating to page 3 of your brief which I might just follow up. It arises from the second paragraph, wherein you say:

"---there are elsewhere in Canada too many pupil drop-outs from secondary schools because there are not enough curricular offerings to meet the needs of the

non-academic student."

Is that really the main reason for drop-outs today?

MR.OVANS: I think it is an important reason.

THE CHAIRMAN: What additional curricula would you like to have?

MR. OVANS: I think there are still far too few vocational schools.

MR.STEWART: That leads, then, to this statement on page 4:

"We must avoid overemphasizing the production of technical specialists, to the detriment of that broad general education in the humanities which is most basic to the successful functioning of a modern democracy."

How far is vocational education in the high schools consistent with that type of broad education?

MR. OVANS: The vocational programme of the high schools in British Columbia at least, and I can only speak for this province, is designed to provide education in such subjects as social studies along with the practical programme. No high school student in British Columbia is permitted to take a completely practical programme. He may concentrate on those subjects, but he must

have some of these basic cultural subjects as well.

MR. STEWART: What additional specific vocational programmes would you like to introduce in the high schools?

MR. OVANS: Agriculture is one. There are a few of our centres in British Columbia which are offering a good agricultural programme, but very few.

MR. STEWART: Would you like to introduce that into the Vancouver schools?

MR. OVANS: No, I would not say that, but the agricultural programme definitely has a place in an agricultural community.

MR. STEWART: The other point at which this ties in is at the bottom of page 3, when you refer to preparing young people for adaptability. If you give your rural young people agricultural courses in the high school, are you adding to their adaptability thereby?

MR. OVANS: You can do so, yes; definitely, because as part of your agricultural programme you have the care of farm machinery, and the mechanical skills developed there can be easily transferred to other situations. Learning to repair a farm tractor and keep it in running order has easy transference to the upkeep and care of an automobile. I think the schools should concentrate on basic skills, and leave the specific skills to be developed on

the job.

MR. STEWART: I think you are quite right there, but I am wondering if you cannot narrow down this high school education to the point where in fact you lose adaptability by having over specialization.

MR. OVANS: Well, we do not want to make any suggestions for over specialization. There is also a suggestion for on the job training combined with instruction in schools. We do meet in the school situation with the problem of the student who has no specific interest in schools, in school life, despite the fact that the curriculum has been broadened considerably over what it used to be. There is the seat warmer type of student, and the chances are that he would show a great deal more interest in his school life if for part of the day he were working in industry and his school curriculum was correlated to help him to meet the situation which becomes apparent to him as a result of his industrial experience. I think we could give many students quite a new interest in schooling if they could relate that schooling directly to a job situation.

MR. GUSHUE: At what point in age or grade would you introduce that?

MR. OVANS: I do not think it could be introduced any earlier than 15. I think the British system starts at 15.

MR. GRAUER: On this question of why drop-outs drop out, are there some distinctive studies on that?

MR. OVANS: Yes, there are studies on that, and quite a number of answers have been given. One is the economic situation, in which they have to drop out because of family circumstances and so on. There are many factors.

MR. GRAUER: Is there anything in the old adage that there are children who just do not like to study, particularly under conditions of full employment, when they can get jobs?

MR. OVANS: Yes, that is so; but there is a real problem in today's society for the 15, 16 and 17 year age group, in that if he drops out, industry generally does not want him because the fact that he has dropped out shows that he is not good material.

MR. GRAUER: It is certainly shortsighted.

MR. OVANS: So many of these children are being kept on in school by their parents because they cannot find jobs. When they cannot get suitable employment their parents insist that they stay in school, and the student becomes what we call a seat warmer.

THE CHAIRMAN: Thank you very much, Mr. Ovans.

THE CHAIRMAN: The next submission is by the British Columbia Automobile Association, and it will be presented by Mr. Irwin, the president. We will mark your submission as Exhibit 86.

MR. IRWIN: Mr. Chairman and members of the royal commission, this brief is presented on behalf of the British Columbia Automobile Association, a non-profit association of 61,000 motorists. It is affiliated with the American Automobile Association, and is part of the Canadian Automobile Association, which in total represents over 400,000 Canadian motorists. Its general policies are laid down by a board of directors, 16 in number, who are business and professional men of Vancouver serving without remuneration in the interests of all motorists of this province.

The British Columbia Automobile Association is convinced that highways are a most vital element in Canada's economy, both now and in the future, hence our presence at this royal commission.

Our first point is that development of our province in particular, perhaps the whole of Canada, is being retarded by the need for even greater highway development. Today, we live in a mobile age. Ability of Canadians in cars and trucks to travel quickly, easily, economically, from city to city, town to town,

province to province, into partially developed areas, is basic to the future development of our country. We can not yet travel conveniently from British Columbia to Ontario or Quebec. Most travel is still via United States routes. Highway freight moves in the same way via United States. Roads and highways are the modern arteries of trade and commerce. More people use their cars, more trade and commerce flows over them than through any other channel of transportation. They far outrank any other means of communication, one person with another. We suggest industrial development, population expansion, development of natural resources, new farm lands, new mines and new forest resources, depend on accessibility by road.

The facts need no further explanation.

Road building and modernizing of existing highways lags years behind the needs of a motorized nation. Since the war, the automobile population of Canada has doubled. Researchers and economists estimate a further expansion in the next 10 years of not less than 50 per cent and by some up to 90 per cent further increase in car population. Yet even today, the use of automobiles and trucks per capita in Canada is approximately in the same position as our United States neighbours were 15 years ago.

Growth of motor vehicle ownership

and facilities to cope with them have been spontaneous and without encouragement and support from any national center. By way of contrast, the federal government has accepted responsibility for expansion of transportation and communication, first with the trans-continental railway system; subsequently, with our national air transportation system; recently, with fuel and gas pipe lines; and in the field of communication alone, with both radio and television. The complete absence of an integral, useful national network of highways points up the necessity of over-all planning in this field to benefit Canada as a whole, the need for over-all financing to bring our highway network up to date and in line with the needs of the average citizen. Today, the most vital and important modern means of transportation and communication, the highways, are being left to the junior governments of cities and provinces for individual attention, without over-all planning to benefit the country as a whole and without an over-all policy for financing.

Urban municipalities face a special problem in dealing with personal transportation and the motor vehicle. Besides a concentration of human population, our major cities face an increasing concentration of automobile population. Every municipality is struggling to cope with increasing quantities of

motor vehicles, and the determination of their citizens to enjoy personal transportation. The tremendous revenue produced by these vehicles in their sale and use is not available to our cities but is drained off first at the federal level and then at the provincial level. Urban municipalities have the vehicles, but not the dollars created by them with which to provide adequate facilities for their movement.

Our British Columbia provincial government is doing an outstanding job of road building with the revenue available to them. We believe this applies to many of the provinces. Currently many provincial governments, such as our own, are spending substantially in excess of income directly received from the motor vehicle, which of course is practical recognition that better roads benefit everybody as well as the car or truck owner.

Federal government revenues invested in highway and traffic facilities are negligible, and one study by the Taxation Foundation that has come to our attention suggests that ever since the trans-Canada road program was announced some years back the federal government has actually invested in highway facilities only 6 per cent of the many millions they have collected from the sale and operation of motor vehicles.

May we contrast the position in the United States.¹ Everyone is familiar with

the widely publicized efforts of President Eisenhower to bring about substantial expansion in highway construction and facilities. One estimate states that \$27 billion need be spent over a 10-year period and that such an expenditure will pay for itself in these savings: elimination of unnecessary operating costs; reduction in cost of unnecessary accidents; saving in lost time of commercial vehicles.

Another contrast with the United States is their efforts in developing urban freeways in which our American neighbours are years ahead of Canada. In their larger metropolitan areas, New York, Chicago, Los Angeles, San Francisco, Detroit, freeways now exist into and out of the downtown areas. In Detroit, for example, you can be travelling 40 to 55 miles an hour on freeways without stop lights or intersections, only two or three blocks from the heart of downtown. In our city of Vancouver, it takes longer and is slower to get into and out of than any other large city west of the Mississippi.

The important ingredient lacking in the Canadian highway and traffic scene is the absence of substantial national participation and interest in the highway problem and its financing.

The trans-Canada highway in which Ottawa agreed to pay one-half of a 24-foot road across Canada, is bogged down and away behind schedule. The approach used in that plan is

totally inadequate for today's needs. The recently published suggestion that the federal government might pay 90 per cent instead of 50 per cent to get this specific road finished, is only a short step in the right direction. A single highway, as yet incomplete, merely touches the fringe of the problem.

Moneywise, the funds already exist in the hands of the federal treasury for an expanded highway program. The revenue already exists in terms of excise tax, sales tax, customs duties, that runs into many millions. It is syphoned off into consolidated revenue with little reinvestment in facilities for the motorist who produces the revenue. As indicated previously, the actual disbursements to date on the trans-Canada highway are estimated at 6 per cent of the revenue received.

The following specific reasons suggest themselves for increased concern about a national highway system:

1. The importance of highways to everybody and their role in expanding trade, commerce, communications, basic industries and the opening of new areas.
2. The special problems of urban areas where traffic strangulation is an economic waste of growing proportions.
3. The further development of tourist travel as leisure time expands for our

own people.

4. The value of attracting tourists' millions from the south of us, more than 75 per cent of whom arrive by car.

5. An adequate highway system becomes an important element in defence. Periodic proposals about emergency evacuation of congested population centres may be impossible due to such urban congestion.

We, therefore, propose four specific things:

1. The federal government assume responsibility for adequate trans-Canada highways, reaching from the Atlantic to the Pacific, in the same way that they concern themselves with railways and airways.

2. That the federal government provide leadership and participate financially in pioneering road development to open up our northern areas in British Columbia, Alberta, Yukon Territory, northern Ontario and Quebec.

3. That the federal government earmark all federal revenue from the motor vehicle for reinvestment in highway and traffic facilities.

4. That the federal government
(a) assume 50 per cent of all arterial highway costs joining our major cities and towns, and

(b) enter into a three-way

division of costs with metropolitan areas and the provinces for an immediate start on development of traffic throughways, into, out of, and around, our major centres of population.

I realize that much of this is duplication of some of the other briefs, but this is very respectfully submitted by our British Columbia Automobile Association.

THE CHAIRMAN: Well, I would like to ask you a question or two about taxes. You state that the federal government already gets revenues from excise tax, sales tax, customs duties, and so on, which runs into many millions of dollars.

I suppose it does. A good many of those millions are needed for other things that have to be paid for somehow or other. I was going to ask whether in your opinion the individual car and truck owner, which presumably includes all of us, pays enough in the form of gasoline taxes and licence fees toward the terrific cost of roads and highways. Do you think we should pay higher licence fees?

MR. IRWIN: Oh, no; far from it. I think we are overtaxed now..

THE CHAIRMAN: Then how are you going to get the money?

MR. IRWIN: Actually part of the idea behind such a brief ~~is~~ this is to point out

the necessity of roads to develop new areas which in themselves are going to be a source of income for more and more people in our expanding economy, and out of these newer areas we are going to collect something in the form of taxation at our federal headquarters, surely. We are in the situation now of having had an area of construction neglected that should have had more spent on it in earlier years. Now, when construction is much more expensive, the amount collected from the motorist, or the automobile taxes generally, must be allocated more to that type of construction. We have not started soon enough, and there is a period of, shall we say, retrospect which must be picked up.

MR. GRAUER: Does your feeling that the motorist is paying too much taxes extend to the trucker also?

MR. IRWIN: No, I would not go that far. Perhaps I should let you finish.

MR. GRAUER: As you know, our highways are filled with trucks.

MR. IRWIN: I think that is a problem which is under advisement now in our association, and it is being considered very seriously not only in Canada but in the United States. We do not feel that the heavy truck, carrying a heavy load, is bearing its share.

MR. GRAUER: Dealing with your specific recommendation that the federal government

earmark all federal revenue from the motor vehicle for reinvestment in highway and traffic facilities, is that the result of any study which would equate the needs in highways to that particular source of revenue, or is that just a feeling that what comes from the motorist ought to go back for his purposes?

MR. IRWIN: The latter part would be the most truthful part as far as we are concerned. We have given it a great deal of consideration. Unfortunately the members of my committee are all out of town, and they probably could have answered this better. Mr. Clark Simpkins would have presented this report had he been here; but my thought on the matter would be that it would be not a specific study but a general study.

MR. STEWART: How would you like to extend that principle to other forms of taxation? How would you like to take the revenue from liquor taxes and give it back to the liquor consumer?

MR. IRWIN: There may be people in the room who would welcome that. I don't know; but I do feel that the automobile owner, the man who has been driving an automobile for years, has been unfairly taxed.

THE CHAIRMAN: The automobile owner, after all, is always here; he also has children who have to go to school, and somehow or other

somebody has to finance the cost of education.

You cannot divide him up into an automobile owner, and the father of some children, and a liquor drinker, and various other pieces.

MR. IRWIN: I might differ with you a little bit there, Mr. Chairman, if you would permit me to say so.

THE CHAIRMAN: Of course; that is what we are here for.

MR. IRWIN: The automobile owner has been a very vulnerable target, in that his automobile is taxed before he gets it, and he has to pay that tax. There is no opportunity for him to be assessed one way or another; that tax is there when he picks up his automobile, and as soon as he picks it up he is taxed at the federal level.

When he drives it out he has paid a provincial tax, and every time he uses anything for that automobile he has a tax placed on it. There are many times when people in the very most remote parts of the country are enjoying the fruits of his taxation. The road that is built into a mine is just as important to the mine as it is to the truck that runs on the road, and this could be followed right down the line.

I think the automobile owner has been very unfairly taxed, and our presentation today is to try to emphasize the fact that he does

not want the money back personally but he would like to see it spent on roads, which somewhat differs from your suggestion.

MR. STEWART: And give some to the Coca-Cola people?

THE CHAIRMAN: I fail to see that it is very different in principle from what Dr. Stewart suggested. It seems to me that if you really attempted to relate tax revenues to particular sources of expenditure you would get things in an unholy mess.

MR. IRWIN: But, Mr. Chairman, you are taking Dr. Stewart's remark and applying it to the motorist. It is not the motorist himself who is looking for any personal return; it is a group of motorists who feel that taxwise their money has been collected, or rather that the money which has been collected taxwise has not been used to improve a portion of the country that all motorists should be able to enjoy. It is not being used, in their thinking, enough to open up the newer areas. To get down to the immediate problem, it is not being used to build the trans-Canada highway, because we have to go down into the United States when we drive our automobiles to the east. We want to go east by a Canadian road.

THE CHAIRMAN: I have heard people complain about the personal income taxes they have to pay. I have heard corporation executives

complain about the taxes their corporations have to pay, and none of them seem to think they get enough back.

MR. IRWIN: But this is not a personal return.

---Recess.

---After recess.

THE CHAIRMAN: Gentlemen, shall we come to order? I wish to place on record the submission of Pacific Western Airlines Limited, which we will mark Exhibit 87.

Now Mr. Rogers, managing director of the White Pass and Yukon Corporation; will you submit the brief which you were good enough to let us have some time ago?

MR. ROGERS: Would you like to have it read?

THE CHAIRMAN: Or summarize the main points; that might be sufficient. We will mark it Exhibit 88.

MR. ROGERS: In the submission the first two pages are mainly concerned with the make-up of the corporation and an explanation of the various companies making it up, and I doubt that it is necessary to go into that at this time.

The first point, I think, that might be stressed is the system of territorial roads that was built up by the Canadian government, connecting the principal mining districts -- Dawson and Mayo and Whitehorse -- to the outside through the Alaska highway, which had been opened up by the United States army during the war and then turned over to Canada at the end of the war. Subsequent to the end of the war the company established a road transport service and has operated on the territorial roads and the Alaska

highway since that time.

In 1954 the corporation took on another prospective burden in the construction of an ocean-going vessel to operate between Vancouver and Skagway. There is a note along there that from the inception of transportation into the Yukon, back as far as 1900, there have always been available to the public as shippers, bills of lading, tariffs and rates, mostly in connection with the Canadian Pacific railway on their ocean services.

There follows some history of the placer days in the Yukon and the changes that were made in methods; also in the considerably reduced production from the early days and the consequence population shrinkage due to the use of machinery and also to the smaller output.

The principal development there has been the use of big dredges instead of hand work, and the very evolutionary step of thawing gravels with the latent heat in the water under pressure at thaw points. That was developed over in the Fairbanks area. Previous to that there had been the use of steam at thaw points; and in those days I have known of one contract for cord wood to be as much as 75,000 cords for the subsequent season's operation.

However, it is pointed out that the Yukon territory is not through with its gold production. It probably has a level of production

somewhere around \$2 million to \$2.5 million which can last for another 20 years if inflation does not blot out the profits or the break-even point.

There have been no large discoveries of placer gold for some years, and the territory has been generally worked over in prospecting. Since this brief was written I read a remark made by Dr. Hugh Bostock that there will not likely be any more large discoveries. There will be small ones, but not large ones.

I have called attention, too, to the fact that much of the area has a heavy gravel overburden and deep permafrost, which prevents placer prospecting. It also is not a help to the lode prospecting, because unless it outcrops there is not too much chance that it will be readily found. Once an outcrop shows an indication, then money can be spent. However, that does not take into consideration the new seismographic and other methods.

Then I touch a little on silver and copper in the early days. Silver is still, and more so than ever, one of our main products of the Yukon area. Copper is not a product at the present time, but we feel that within the near future there is a possibility that copper will be produced, because there has been considerable copper taken out of there, and there is much float and some ore in a form that

I do not believe is found very often. I have seen pieces of copper the size of this table, just pure copper, that you could cut copper off any place. Those are up the White river. Peculiarly enough, in the very early days in Dawson they were used as a sort of sign, and behind every piece of copper on the front street was a saloon. I don't know what the connection was.

I deal then with the increased prospecting and the increased operation in there that occurred after the war, due to the increased prices of metal brought about by the war and the fact that in the general search for the base metals, the large successful mining companies in Canada have had funds to spend for intensive and scientific prospecting. Our prospecting in the old days was not very scientific, but it is remarkable how good it was.

I deal then with the difficulties which the Yukon has because of its position in behind the Alaska Panhandle. If the economy of Canada and the United States were exactly equal -- which they are not, because the United States has a much higher manufacturing potential and production -- and if wages were the same it would not be so bad, but in our transportation we are endeavouring to supply the Canadian part, but some of our expenses are high -- quite a few of them -- due to

the fact that our railway must, because of geography and the difficulty of fighting snow, be based from the Alaska side, and all our trains are operated with United States crews; and the transfer at Skagway from vessel to rail has been quite costly.

The next paragraph deals with the difficulties of the miners in the days before the territorial roads were built, I mean the miners in base metals, due to the fact that they had nothing but the rivers to use, and none of those rivers are of use for more than 5 months. Some of them, particularly in the mining districts, have only a full usage for about $2\frac{1}{2}$ months in the year.

I call attention to the fact that today the value of the base metals and the gold going out of the Yukon is more than the value of the gold going out in the years 1898, 1899 and 1900.

MR. GRAUER: Does that also include the asbestos?

MR. ROGERS: Yes, that does include the asbestos. There is a paragraph dealing with the prospect of a railroad from some railhead in southern Canada, or part way up toward the north through to Alaska and touching the Yukon as it goes. However, unless it is primarily for defence purposes, I think it will take a lot more development of industry in both northern Canada and Alaska before that can happen.

I then tell the commission of our new plan of attempting somehow to bypass this very heavy expense in the transfer at Skagway from ocean to rail and rail back to ocean on the southbound stuff in connection with a new ship that was especially designed for us and built in Canada. The cargo containers were designed together to handle the necessities of the transportation there in connection with the cold temperatures, protection against the outside cold and frost and so on.

I refer to the matter of the handling of the ore, which comes sacked because of its rather high value and the fact that they do not lose a great deal through sifting, particularly the lode ores, and the further fact that otherwise it would be very difficult to handle with the number of transfers that would have to be made.

I think if the commission will permit there is a little more I would like to present along the line of what I have already presented. Some of it refers to some of the evidence that has already been covered by the commission, and our views on it.

THE CHAIRMAN: Certainly.

MR. ROGERS: In that connection I think probably it might be well to explain to the commission that our reason for presenting our brief, which deals primarily with

transportation, in Vancouver rather than in Edmonton was that Vancouver has been traditionally, for half a century, the main supply point for the Yukon, and we think due to the thousand miles of ocean, which is really cheap transportation, that will continue, regardless of what we hear in the waterfront news every day.

Commissioner Collins of Yukon Territory points this up in his brief when he refers to "the Yukon's great asset of being near to tidewater". This is no doubt the reason that Yukon developed earlier than the other parts of northern Canada when waterways and on foot were the only means of transport -- the ocean to the northern limits of the inside passage, by foot across the relatively short mountain passes to the headwaters of the Yukon and down that river system to central and northern Yukon and the interior of Alaska. Base metal production also developed faster in this area for much the same reason. Transportation costs in Yukon are higher than in southern Canada, but are still considerably less than in similar sub-arctic regions east of Yukon.

The following remarks are in connection with those made on pages 9 and 10 of our other brief, in connection with transportation.

The White Pass, with its long history in Yukon and its many years of being virtually the only transportation, became

naturally the whipping boy for all of the territories' troubles and from recent pronouncements has much the same position even yet, when there are other competing methods of transport.

The recent facts of this matter are that we have had no increases in freight rates in our operation since 1939. While our labour and material costs are greatly increased over 1939, we have been until very recently on the same basis of freight rates for our railway and services beyond equal or less than at that time.

The reason for this reverse trend with us, to all other transportation costs, is the increased volume of freight traffic over our railway resulting in more effective use of our equipment and manpower. Recently with the commencement of our own ship operation from Vancouver to Skagway -- and by the way, she arrived in Skagway on her first trip yesterday afternoon -- we have made a new reduction of from \$6 to \$8 per ton. That will be in the neighbourhood of 10 to 12 per cent. This is due to more mechanized handling. Today we are closer to full utilization of our equipment and manpower than we were at the end of the war but important increases in north tonnage can still create some further reductions, or if there is further inflation, present costs may be

maintained.

We calculate that the average cost of transportation to the public in our rates between Vancouver and Whitehorse in both directions of the types and quantities of tonnage we expect to carry in 1956 at the new rates will be approximately 2.5 cents per ton-mile for the 1,100 miles, which is a low figure and approaches our railway per ton mile average across the United States and Canada. I think it is in the neighbourhood of $2\frac{1}{4}$ cents at the present time.

I dealt with some other general items in the No. 2 submission which was presented to the commission, and there is one part of that on which I would like to expand a little. I would like to talk about the Indians in the Yukon for a moment.

In the reports of previous hearings of this royal commission, I think Mr. Grauer asked whether Indians and Eskimos were suited to industrial jobs. My experience with Eskimos has been limited and I cannot speak. As to the Indians, we have used them fairly extensively in our small operation as section hands, and wharf and warehouse labour, and we completed a relocation of a mile or two of our railway in 1940 with an Indian foreman with a grade school education whose entire crew were whites, and had absolutely no difficulty at all.

On the general subject of the Indian living in towns or near them and working in industry, with children attending the schools, it is my belief that such Indians should not have the dual position in society of a worker earning like wages to the white in the same job and also of a ward of the government. The latter tends to take away his self-reliance. With a little patience and firmness on the part of the officials and the employer, he can become a permanently useful member of the community. He may backslide occasionally in the fall and disappear into the bush to get himself a moose, but with each generation this will be less and less.

MR. GUSHUE: There will be less moose, too.

MR. ROGERS: That is so. For the Indian living the Indian life -- that is in the northern part of the territory away from the centres of population -- I am sorry I cannot suggest a solution until industrialization like in southern Yukon reaches him. I probably do not need to tell the commission that I am reaching the age where we look back to the old times but I cannot help but decry the passing of the man who raised his family, educated them to the extent offered in the north and then out of savings not easily won, sent them outside to higher education and didn't consider that he had done anything out of the usual or that he

was a hero. The average person today will not cast his lot with our north country except at a fat premium. It is a large factor in slowing up the development of that area.

There is one other thing I would like to deal with for a moment. On page 8 of the first submission I said:

"There are in the broad valley of the Yukon river and in the Rockies on the east side of the valley, several large deposits of base metals that will require careful study in methods of treatment and costs, including transportation. An extension of the railway line, now operated by the Route, north for an additional 110 miles on the west side of the Yukon river to the town of Carmacks would, when the volumes of ore are sufficient to make operation economic, provide the cheapest transportation to available smelters and shorten the more expensive road haul distance from these prospects."

MR. GRAUER: Is that something which in your opinion is likely to happen in the next 25 years?

MR. ROGERS: Well, then or never at all, I would think. I believe that is quite a definite possibility. In that area there are some large deposits over in the Rockies, that is on the west side of the Rockies in the Pelly valley that seem to be considerably richer than they are down in the main valley. That might have been because they have not been sufficiently prospected. However, in one case they have been quite well prospected, and they are huge.

One of the good things about the mineral development in the Yukon has been the better than average values of the ore as taken out of the ground. In the placer days, of course, it was pure gold. In the present day of base metals our lead and zinc have been associated largely with silver, and pretty important silver, and in one case with considerable cadmium, which is pretty valuable. That has made it possible for us with our rather primitive transportation methods, particularly the fact that a man had to pile his ore up and wonder all winter what was going to happen to the market with all the stuff that he paid the money to get out, and so on -- it all made it pretty difficult.

But that statement or that remark I made in this brief about Carmacks is not at all just to attract interest. You

might think I am talking a lot of the importance of the White Pass, but I make the statement that we have tried always -- because that is our only hope of the continuation of growth in that country -- to keep abreast of the mineral development. That is really the only thing the country can produce, except living room for the population of Canada.

This is not something we dreamed up to present to this commission. It is something on which we have spent some thought, and I would just like to read a telegram that we received from the people in London who have the financial stake in this railroad, not its entire capital but in large measure its capital is still held there:

"Think Rogers' brief should emphasize plans for extension of railway to Carmacks and other areas as they become economic."

So it is not just a dream of ours; it is a prospect ahead of us that we hope the finds and the development of those finds will make a reality.

MR. GRAUER: On page 4 of your brief you refer to these new strikes. You say:

"The just past summer has produced its new finds -- "

Are they in a direction which would assist in that realization?

MR. ROGERS: Yes, over in the Rockies, and there is also another one in the lead-zinc class down near Dawson. It seems to be sort of rolling up there, you might say; it is cumulative. After having found a very, very rich mine, apparently, of a very, very high grade of asbestos at Cassiar, we now have a new discovery near Dawson which, while not so rich, is very extensive. That is an asbestos find.

That is one thing one finds in the Rockies; prospecting has been developed. They have prospected it more assiduously than they had done up until last fall, and that also looks like a very rich mine.

MR. GRAUER: You are reasonably optimistic about developing substantial new ore bodies up there, then?

MR. ROGERS: Yes. I am not a mining man, of course, but I think such men as Fred Connell and the mining men who do know are very encouraged about it. Dr. Bostock has been a very great help to the men in the last few years in this way, that he is not only a good geologist and a good demonstrator of the geological formations in there, but he seems to have the feel of the instrument, and he has not been wrong too many times.

MR. GRAUER: I suppose a smelter on

the coast, almost anywhere, would be of substantial assistance to the mining development?

MR. ROGERS: Yes. You might reasonably have a smelter in that area down there near Carmacks. Power is going to be your biggest difficulty.

MR. GRAUER: That is inland?

MR. ROGERS: Yes, about 125 miles in from Whitehorse; that is, about 250 miles from the coast, roughly. There is some coal up there, but it has not been sufficiently developed to be of much use, although Bostock says there is bound to be found coking coals in that country. But by the time these things get along we will probably be using electricity. We have the potential power in there once the need for it is developed.

MR. GUSHUE: You speak in your brief, although I do not think you touched on it speaking to us, of discrimination in United States and Alaskan ports against Canadian coasting ships. Would you develop that a little?

MR. ROGERS: Yes. The same thing is true in Seattle or in Tacoma or any of the United States ports. A ship from Vancouver or a ship going into Skagway from Prince Rupert or anywhere else is a foreign ship, and is treated exactly in the same way as they would treat an off-shore ship coming in from Japan, Australia or any other country. When it comes

into United States waters the longshoremen do not give it the same rules that they do their own coasting trade. Those boats are definitely coasting boats.

The practical politics of the thing is that instead of allowing sailors to work some of the hatches, as they do on their own coasting trade, or allowing smaller crews in the holds, the rules provide that there shall be several more men in the hatch. It is something that is entirely internal in the United States, and it is not a matter of law, but is a matter of practice. It has almost wound up in this Puget Sound - Gulf of Georgia business, in that the United States ships come up here and do most of the coasting, and our small ships do not do it.

The Alaska Steamships boat running into Skagway handles one hatch of the ship at all times and if they can handle all cargo from that one hatch, that is the hatch that works. With a Canadian ship going in there, some of them have been given the one hatch; others have been denied the one hatch. With the Alaska Steamships boat being a United States line, the crew is usually half longshoremen working the hatch, 5 or 6 men. It is never less than 8 on a Canadian ship.

MR. GUSHUE: These are United States union restrictions?

MR. ROGERS: Yes.

MR. GUSHUE: Are these international unions?

MR. ROGERS: Yes.

THE CHAIRMAN: Well, thank you very much, Mr. Rogers. It has been very interesting, and we are grateful to you. As you know, we were in Whitehorse, and we heard a lot about your operation up there, and we are pleased to receive this brief.

MR. ROGERS: Thank you very much for inviting me to be here.

THE CHAIRMAN: The next submission will be made by Mr. George F. Edwards, president of the Senior Citizens Association of British Columbia. Will ypu proceeds, Mr. Edwards?

MR. EDWARDS: Mr. Chairman and members of the commission, I do not make any apologies for bringing before the commission some facts which I think possibly the people of Canada should know better than they do.

I gave to Mr. Claxton a copy of a report issued by the old age pension branch to the provincial government, which shows a circle of pie-shaped pieces indicating the percentage of people who have certain amounts of money or principal; and it is very significant that 61 per cent of all those on social assistance from 65 to 69 years of age have no assets whatever other than their pension, which of course is \$40 per month supplemented to some people in British Columbia by a \$15 bonus, but not to all. Some 21 per cent have less than \$1,000, or just about enough to bury two people. So 82 per cent of all those on social assistance -- the same figures would hold true for all those over 70 -- have less than \$1,000; 13 per cent have between \$1,000 and \$2,000, and only 4½ per cent have over \$2,000.

I would like to point out, Mr. Chairman, that our organization is named the Senior Citizens, and the name is sufficiently

broad to justify our interest in anything which has to do with the proper functioning of our democratic institutions.

I may say the first resolution we passed at our two conventions -- we just have been in operation for 2 years and we have around 5,000 members -- is that we believe democracy is the best form of government so far devised by humans. That is our faith, and any criticism I have to offer now or at any time of the fact that the federal government have not seen fit to give our people who are dependent on the pensions enough to live on, is no criticism of the system of government but rather of the practice under the system which we have.

It is my belief that the people of Canada owe a greater debt to the senior citizens of this generation, maybe, than in any other country ever owed to a similar number of people, because we took the country from the great lakes to the Pacific, the broad prairie and undeveloped British Columbia, and made it blossom, and as a result it produced billions of wealth which benefited the whole economy of Canada. The prosperity we have now, which is daily increasing, and the work of your commission and many other agencies, all are based upon the work these people did; absolutely. If it had not been for the contribution they made,

you would not be now discussing the further development of this country, because it would have been still in its initial stages. Yet after the contribution they made, they are expected to live on \$40 a month.

A lot of our people are paying \$30 for a single room. I have had many cases come to my attention where people are trying to live on \$10. They are suffering from malnutrition, which is just a fancy name for slow starvation. We feel that the government owes those people better treatment than they are getting, and we feel that a sound economy cannot be based on an injustice to any large number of people. It certainly cannot be permanently based on a sound foundation, and we believe your commission should be interested in having the economy geared to insure that every section of this country and every person who makes the best contribution he can is fairly treated.

I think there are about 800,000 pensioners in Canada, or around that. Around 300,000 of these are dependent on their pension, practically. In most of the provinces all they get is \$40. In British Columbia some of them who can comply with certain regulations get another \$15. Even that is not enough to give a decent standard of living to the people who contributed what these people did.

May I say, Mr. Chairman, that the government of Canada is in many respects responsible for the fact that many of our people find themselves facing the last few years of life with little or nothing, because of fiscal policies since confederation which have enabled Canadian manufacturers, largely in eastern Canada, to levy tribute upon the people in the other provinces, which they did to the fullest possible extent.

I had the privilege of being president of a trading organization in the old Saskatchewan Grain Growers, the forerunner of the present co-operative federation which now does a business of around \$35 million. We found that we could import blankets from Great Britain and undersell the ones that were being protected in Canada. At that time Canadian blankets were being sold for \$12. We brought them in and sold them for \$10, and paid a 12 per cent duty. That is the extent to which some of the manufacturers take advantage of the fact that they have the privilege of levying tribute.

So we say the federal government are very largely responsible, through their fiscal policy, for the fact that the people all through the provinces, and I am speaking particularly of British Columbia, now find themselves in their old age with nothing.

I happened to be the head of the research department of a farmers' organization for a while, and know something about how to compile figures. The government of my province presented a brief to the Rowell - Sirois commission, and the Saskatchewan government did the same. Dr. Rogers of Queens University submitted figures showing that the tariff had cost Saskatchewan, from 1905 to 1931, over a billion dollars. If these people who settled and developed this country had that money, they would not be asking the federal government for anything; they could stand on their own feet. So I do not think there is anything wrong in suggesting to this commission that it might at least recognize the fact that there is a very, very great injustice being done to hundreds of thousands of people who developed this country, and to whom the country owes a very great deal.

That is all I am going to say about that. There is another thing; that is, that ever since the war there has been a spiral of inflation, which is still going on. The only reason it has not been more accenuated is that the farmers are accepting lower prices for their goods. Manufactured goods on the whole are going up, and they must continue to go up as long as the present practice of labour organizations of asking for or striking

for increased wages or shorter hours or fringe benefits each year is continued. I belonged to a labour organization myself. I was a mechanic, and went into bookbinding and book finishing and worked at it for 12 years. During that time we had an increase of 6 cents an hour. Things were on an even keel. You knew when you bought insurance, for instance, that you would get a dollar back for every dollar you put in.

You cannot do that now. I know our cost index shows only 116, but if it were based on the proper figures, from 1939 to 1949, it would show about 187, and I suppose that is one reason the figures have been put on a different basis.

I am not blaming labour for attempting to get a decent standard of living. I am not blaming them for trying to get a larger share of the wealth which they see being produced in great abundance by technological advances and new sciences and so on. When they see larger profits accruing to the corporations, naturally they think they should have more of them.

I am going to make two suggestions for your consideration. One is this, that the time has arrived in our social development and industrial development when we have to find a better way of settling industrial disputes than by having them settled by force. I know

labour is very jealous of what it calls its right to quit work. That is not involved at all. What is involved is the right of thousands of individuals, or hundreds of thousands in the case of large corporations, entering into collusion to quit work at the same time, and thus paralyze the whole economy of the country. We think we live in a free country, or it is called a free enterprise country. There is no freedom any more, because right here on the island at the present time 140 men are preventing 8,000 men from working. They cannot work; their plants are held up because the engineers cannot settle their difference. That is the very negation of freedom, and I think we have to resolve these differences without violence. I do not think any group of people have the right to dictate to any other group of people whether they shall or shall not work, nor do I think they should prevent people who want to go into the plant from doing so by just being there doing what is called peaceful picketing. There is nothing peaceful about it; it is intimidation.

I think the time has arrived when we should have labour courts to settle these matters without interference, just as we settle disputes between people individually. At one time we drew our swords and the better man would kill the other, and that was supposed to

settle the matter. We found a better way, and now we submit the matter to a judge and abide by his decision. I think we will have to do that in labour matters in the very near future, or we will find that we will price ourselves out of a lot of markets. That is what we are doing at the present time, because of the disturbance of our economy and the increased costs occasioned by the cessation of work and the dislocation of the whole industrial setup.

I do not think that it would be a permanent solution, but I think it might be a step in the right direction, and I cannot see why labour would not welcome such a suggestion. I figured out when the loggers' strike was on that it would take 9 or 10 years at the increased wages to make up the loss they suffered in the strike. I do believe this method would help solve this problem and I do not see why labour should not welcome it or why industry should not, because industry loses every time there is one of these strikes, and I think they would like to avoid the possibility. I would think labour would also, if they could find some better substitute.

So the suggestion is that this commission might suggest that a study be made of the possibility of organizing the industries so there is a better division of profits. I do not think labour should be asked to manage

the business they do not create, but I do think they should have a little more participation in the proceeds of their efforts, including the capital invested by others, than just their day's wages. I do not think they will ever be satisfied, nor do I think we will ever have industry pleased while the present situation continues. It is in our interests as ordinary citizens to do what we can to focus attention on the problem of recurring strikes and threats of strikes and the dislocating effect it has, and the increase in cost involved, which is sometimes out of all proportion.

I believe it might be better if we had something like what is being done in the United States in at least 1,500 plants. That is, after a certain reasonable profit is made on the capital invested, then there should be some division of profits and there should be a frank discussion with the employees and better employee-management relations, and I think it would create more harmonious relations.

There is another thing I would suggest, and that is that you might investigate the spread between the cost of production and what people pay. I have here in my hand a cribbage board. It happens to have been made at a plant of which my son was manager, and it is made out of plastic. The machine that

made it cost \$20,000. It is very well made, and a wonderful piece of machine tooling. It looks as though it should bring a fair price.

I said to him, "What does it cost?" and he said it cost 22 cents. I said, "What do you get for it?" and he said, "Well, we sell directly to a department store and others, and we get 35 cents. However, further east they sell for more. In Edmonton they sell for \$2." That is an increase of 800 per cent over the cost of production.

That is only one instance. I believe there is a big field there in which you might have some committee working to try to find out what is the explanation for these terrific spreads between the cost of production and the cost which is paid by the consumer.

These are things which affect groups of people such as ours more than any other class, because we have no way of making any adjustments. Our incomes are all fixed. You will all be on fixed incomes some day, and these things I am bringing to your attention are factors affecting not only us but the future generations who will eventually be on fixed incomes also. We have to find some way of keeping our economy on a more even keel, and it cannot be done with bad relations existing between capital and labour, and a lack of cooperation between them.

Before I go I would like to suggest that you might devote some attention, to see if you can suggest that labour organizations and other groups do what we on the prairies do; that is, devote more attention to co-operation. We have a complete co-operative commonwealth. We sell everything we produce co-operatively and we also can buy almost anything we want co-operatively. We have our credit unions which operate as banks, and there is one co-operative organization in Regina, which has a population of 70,000, which does over \$1 million worth of business a year.

I think co-operation wisely applied -- and it is being wisely applied on the prairies -- has more of the answers to some of our economic difficulties and dislocations than any other single thing. It has to be intelligently applied, of course. It is midway between some of the extremes of capitalism and the regimentation of socialism. It has worked very, very well wherever it has been intelligently applied.

I appreciate the opportunity you have given me of making this presentation. Possibly I have strained your terms of reference a little, but if so I ask your pardon, because I do feel very strongly about the people I represent and the fact that they are suffering what I consider a very grave injustice,

and it is not beyond the power of this country to remedy it. Perhaps we went too far in providing universal pensions. If that pension now being paid to the people who do not need it were given to the people who do need it, we would have a more healthy situation, but I know the government will not go back on it now.

THE CHAIRMAN: There is one question which Mr. Grauer would like to ask you.

MR. GRAUER: I think you pretty well touched on it in your last remarks. You had said earlier that the pensioners are expected to live on \$40 a month, and as you indicated latterly, the Canadian system has a different approach to the systems of some other countries. The theory is that everybody at the age of 70 should get a pension of a minimum nature, namely \$40 a month, and that people are expected during their lifetime, by their own efforts, to make preparation for their old age to supplement that pension.

As you know, there are other approaches to the question of old age. One is that people be given a pension more adequate to their needs after a certain age, usually 65, with a means test applied to see whether or not they need a pension and to what extent they need a pension. Another approach which is followed in the United States is that a comprehensive, contributory old age pension plan

is established to which employer and employees contribute. That does not cover everybody, of course, but it does cover the industrial segment and allied segments of the population. That gives a larger pension at the age of 65, based upon contributions throughout the lifetime.

I was wondering if you had any opinions about which of those systems you think is best?

MR. EDWARDS: Well, I think possibly the providing of an annuity at a certain age is a step in the right direction, providing that it does not entail the expenditure of so much money that the government will not increase the pensions to those who actually need them. Of course \$40 is not enough.

We suggested a plan under which it might be done. If they do not feel like raising the \$40 to \$60 and levying the necessary taxation, because parliament will not vote that amount of money, they should not keep the people who contributed what I said they did contribute on a starvation basis because of the fact that it takes so much money to give pensions to those who do not need it.

We suggested that if they will not raise it for everybody to \$60, then everybody should be asked to sign an income tax return, and people below a certain income would become eligible for it and the others would not.

That would not be any disgrace.

I suppose Mr. Grauer signed an income tax return, and everybody who is on salary does the same. I think in the long run Canada's plan is better than the United States plan, but it does not help the people who produced and contributed so much to live their last few years in comfort and peace. If the great war expenditure could be cut down some I do not think the government would have much difficulty in raising the pension to \$60 for everybody and levying more taxes to do so. I think most people would be willing to do that, and I believe economists, of whom I understand there are some on this commission, appreciate that social payments stabilize the economy. They are a cushion against the kind of depression we had before, because that money goes into circulation and it is all spent. There is \$42 million being spent in British Columbia each year in the way of pensions. That fortifies the whole economy of British Columbia, and I say in our report to the provincial government that we are not a detriment to British Columbia; we are an asset, because not only is the \$42 million spent, but thousands of people come here with something more in the way of money. I sell my farm and get a good price for it, and I spend a lot of the money here.

So the fact that British Columbia

attracts many senior citizens is an asset, not a burden at all. I think that is the idea we should try to dispose of, that the senior citizens are a burden on British Columbia. They are not. In my opinion they are an asset.

Well, thank you, gentlemen.

THE CHAIRMAN: Thank you very much for coming, Mr. Edwards.

We will meet tomorrow morning at 10 o'clock in the social suite, and adjourn for lunch at 1 o'clock until 2:30.

At 5 p.m. the commission
adjourned.

ROYAL COMMISSION

ON

CANADA'S ECONOMIC PROSPECTS

HEARINGS

HELD AT

VANCOUVER, BRITISH COLUMBIA

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Thursday, December 1, 1955.

The commission resumed at
10 a.m. in the Social Salon.

Appearances:

Mr. Harry Warren, University
of British Columbia;
Mr. Thomas Elliott, Manager;
Mr. Harry Hall, consulting
mining engineer;
Mr. W.B. Smitheringale, mining
engineer;
Mr. Charles Campbell, consulting
mining engineer;
for the British Columbia and
Yukon Chamber of Mines.

Dr. F.A. Forward, University
of British Columbia.

Mr. G.W.G. McConachie,
president;
Mr. R.A. Keith, executive
assistant;
for Canadian Pacific Air Lines.

Mr. S. Jenkins, Marine Workers
and Boilermakers union;
Mr. Emil Bjainison, research
director;
Mr. Jack Guest, grain workers
union;
for the Shipyard General
Workers Federation of
British Columbia.

Mr. Charles Woodward, vice
president;
Mr. Gordon Skinner, vice
president and comptroller;
for Woodward Department
Stores Ltd.

Mr. E.L. Harrison, vice
chairman;

Mr. D.F. Miller, Canadian
Fishing Co.;
for the Fisheries
Association of British
Columbia.

Mr. A.H. Williamson, vice
president;
for Wood, Gundy & Co. Ltd.

THE CHAIRMAN: The first item this morning is a brief to be submitted by the British Columbia and Yukon Chamber of Mines, which we will mark Exhibit 90.

MR. ELLIOTT: I would like you to meet Mr. Harry Hall, consulting mining engineer, of Vancouver; Dr. William B. Smitheringale, well known authority on mining affairs in the Yukon Territory; Mr. Charles Campbell, well known consulting mining engineer, a man who has spent many years in advocating an iron and steel industry in British Columbia.

MR. WARREN: Mr. Chairman and gentlemen, the first thing I would like to do is introduce the British Columbia and Yukon Chamber of Mines, and say a little bit about who we are and what we represent.

It was founded in 1911 and has been responsible for publicity and information for the mining industry in British Columbia. It has acted as a clearing house for prospectors

to the mining companies, and mining companies to the prospectors. One of its major roles has been that of education, trying to get more people understanding the problems and getting them interested in the mining industry of British Columbia and Canada.

To give you an example of what we have achieved in that direction, this year our mining school has over 450 paid up students going two nights a week to see what they can learn about prospecting. Some of them are prospectors. A great many of them are men and women in every day life ranging from people who are not able to take notes to university professors, and we have had city engineers and doctors. Those people come and study for about 24 to 30 lessons in the winter, and I would be very grateful if some time when you are here you could come and see this group of people. They have to be seen to be believed. I understand there are other schools throughout North America, but when I tell you we have drawn people from far away points to come here and take their holidays, you realize that we have a rather select clientele.

The chamber of mines is supported by hundreds of prospectors, by geologists, mining engineers, mining companies, supply houses and also by the British Columbia government and the city of Vancouver. In this

capacity we have a chance to hear all the complaints that the prospectors make. We are a sort of sounding board, so when anything is wrong with the laws or the attitude of the government, we can say that unofficially we are about the first to hear about it.

We also hear the beefs on the other side, and we think we are in a position to pass on to you gentlemen something of the feelings of the mining industry.

Since gold was found on the Fraser, British Columbia mines have produced \$3,500 million worth of new wealth for the province of British Columbia. At the present time we are adding annually about \$150 million of new wealth. We have the largest single producer of lead, zinc and silver in the world. We have the biggest mercury deposit in the British Empire. We have important copper mines. We have very significant coal fields, and we have the richest chrysotile asbestos deposit in the world, as far as we know.

I would like to just point out, when you consider that from 1898 to 1923 there was not a single significant mineral discovery made in British Columbia, the practice of sending out a large number of people, each with a little knowledge, has been a very significant contribution, and it goes far beyond the borders of British Columbia and is a matter of concern,

we think, to the dominion as a whole.

Now going on to some of the recommendations which the British Columbia and Yukon Chamber of Mines would like to make, the first problem the mining industry faces, we think, is getting the people of Canada more interested in the problems of the mining industry. Youngsters going to school see lawyers, doctors, business tycoons. They are familiar with them; they can name them. Without attempting to be facetious, I would point out that probably the British Columbia representative on your commission is well known to hundreds of youngsters and is a model for them to pattern themselves after.

How many youngsters in school in Canada know the names of the great prospectors, and of the mining engineers and geologists who have developed these mines? So that whereas in the past we drew our support from a large and informed public now, the mines being a long way off, people do not hear about them. We would like to see the dominion government use all the facilities they have for making mining popular.

You may ask in what way. I have two good examples. After the war, when they were trying to rehabilitate the veterans, they sponsored these little text books on prospecting, which were got out by the Canadian

Legion. These went out of print. They were very successful. We gave out hundreds of them to budding prospectors and other interested people.

As I say, they went out of print for the lack of a few hundred dollars; and with all the good will in the world we have not been able to get the Department of Mines in Ottawa to republish them. The plates are lacking; and although the cost would be negligible, we cannot do anything.

Then the Geological Survey have gotten out some excellent publications on prospecting for uranium, and I think you will agree that it has been very stimulating, and it has been very hard to keep those publications in print.

THE CHAIRMAN: You say you cannot get the Department of Mines to reprint the booklets?

MR. WARREN: No. We made representations and pointed out that we had found them most useful and asked the department if we could have those booklets reprinted. I myself went east to Ottawa and saw the director of research, Dr. Hume. He said, "Well, we did have those, but we have had an awful job collecting the plates, and we cannot get sufficient funds to republish them."

THE CHAIRMAN: Is the problem

the plates?

MR. WARREN: I think the problem is a budget of about \$2,000 to completely republish the job. But it was not anybody's particular baby, and we have been without those for how long now?

MR. ELLIOTT: It is five or six years. They sold them for \$1 a set, incidentally.

MR. WARREN: Four equivalent United States text books would be \$7.50 or \$8, and this is a much more practical thing. It is written by Canadians for Canadians, and we would rather use that.

THE CHAIRMAN: Have you written the minister about it?

MR. WARREN: I did not see the minister. I saw the deputy minister and Mr. Hume, and we have had correspondence.

MR. ELLIOTT: We have written twice, I believe.

THE CHAIRMAN: The principle when you are dealing with the government is never to take no for an answer.

MR. WARREN: It was the principle involved here. I have another article in my brief case which is a good example of what the government has done. In 1936 the Minister of Mines of the time gave a series of broadcasts over the air and then they were published in a very acceptable form under the heading, "The

Future of Canadian Mining." That makes extremely interesting reading even 19 years later, and if the government could see its way clear to do more of that sort of thing, I feel that it would get more people interested in knowing about the mining industry.

That was the first point; not, amazingly enough, a request for a large sum of money but for a policy of popularizing mining in the same way that I think Mr. Gardiner has made at least some aspects of government well known as far as the prairies are concerned.

The second thing is a commendation which we feel should go into the record most strongly. That is, to commend the work of the Geological Survey of Canada. It has done excellent work. It is one of the main assistants that prospectors have in going to open up new countries. Quite a number of the old reports are out of date; nevertheless they could be reprinted at a profit, because with the rising price of metals many camps which were not commercial at the time that work was done, now are, and are being reinvestigated. But what is the result when you try to get a report? In many cases they are out of print, and as far as we know the survey simply has no resources to reprint them or to redo the work.

Then, although they are not in the prospecting business, I think it would be

wise to get in the record the fact that some discoveries have been made by the Geological Survey. I particularly draw to your attention the discovery of the big magnesite deposit at Marysville by Dr. Rice, working with the Geological Survey, in 1923. There was also Garson Gray, who was working for the Geological Survey and who first discovered Pinchi Lake, in which we got \$4 or \$5 million in one year. He drew this to the attention of the prospectors in the vicinity, and they staked it and it became a very important mercury source during the war. The survey also stimulated, certainly, and shared in the discovery of Cassiar asbestos, which as you know is one of the most important discoveries that have been made in the last decade. So we feel that the work of the Geological Survey has been of great importance and should be encouraged and enlarged.

Tied in with this is the fact that the Geological Survey have ventured recently into new fields, with the use of helicopters and airplanes in developing the Canadian north, which has paid big dividends. All we would like to suggest at this time is that they be encouraged to do a little more of this pioneer work in British Columbia. We have mountains which make airborne geophysical work extremely difficult and more costly than on the comparatively level areas of the Canadian

shield. Very naturally the Survey has been spending its money in the places where it can do this airborne geophysical work more readily, but we feel in view of the mines we have and those we expect to find that they could do some experimenting and pass on that information and those maps to our prospectors in the same way they have done in eastern Canada.

I think I am correct in saying that the iron deposit at Marmora was discovered as the result of geophysical work, and this is the big iron producing mine in southeastern Ontario. We would like some of that help here to encourage and stimulate our prospectors.

The fourth point the British Columbia and Yukon Chamber of Mines feel is of major importance is the need for a good system of mining laws under which the staking and development are governed by statute. The British Columbia and Yukon Chamber of Mines have already made representations against the Department of Northern Affairs and National Resources for their efforts to change the Yukon Quartz Mining Act. We feel that in so far as is practical, the staking and development should be governed by statute, because a prospector does not want to go out in the field in May, find some likely ground and stake it, and then find that an order in council or some bureaucratic officer at headquarters has just withdrawn that area.

We feel very strongly about that in British Columbia, because some of us were fortunate enough to do work in the United States, and everywhere we go we find that the British Columbia mining laws are so much respected and liked, and any idea of tampering with those laws seems to be most unwise, to put it mildly.

The interesting part which I should draw to your attention is that the vast majority of prospectors; the Yukon council; the Chamber of Mines; the member for the Yukon, Hon. Aubrey Simmons, have all spoken against this. We really attach some significance to this, because Mr. Simmons has otherwise been a very good Liberal and a good supporter of the government, but he has found it necessary to speak against this proposed legislation, which goes against the wishes of a great majority of the people in the Yukon.

The next subject we would like to draw to your attention, and which we think is of major importance all the way across Canada, is a review of the dominion policy in respect to prospecting and mining in national parks. We had the same problem, potentially, with the provincial parks; but that has been resolved most amicably and I think most satisfactorily to the public, certainly to the prospectors of British Columbia. Every time we have gone to the dominion government, however, we have run

into a stone wall.

The point we want to make is that probably no one treasures the beautiful scenery in the national parks more than we do. Perhaps prospectors know more about scenery than anybody else in Canada, certainly more than some of the officials who refuse to let people go into the parks with a prospector's pick in their hands. We feel that there is far more scenery than there are potential mines, and we would be very happy to use all necessary safeguards to see that any place in which a mine is found, an exchange will be made; because those of us who have worked in the Rockies know there are plenty of places in our national parks where no tourist ever goes; there are no roads and no trails, and the number of places where our tourists go when there are no roads and no trails and no accommodation whatever are very limited.

In some of these places last year prospectors who had been fortunate enough to make some kind of a discovery, partly by accident, on going to collect mineral specimens actually had the specimens taken from them by the guards when they came from the park. Then when you go to the parks people they say, "Well, if you have something big we can consider it." But how can you consider something when you cannot take out samples? We feel this is a very

stupid and shortsighted policy, and we would like it reviewed, having in mind all necessary safeguards.

The next thing is that we feel the government should be greatly commended for their work in the past in assisting new mines. The exemption from taxation for 3 years has proved a perfect godsend and a great stimulator of risk capital going into the country. You in the commission probably know more about this than some of us, but the public do not always realize the tremendous cost involved. A moderately small mine may take two or three million dollars before it produces a cent. In the case of Noranda I think it was \$25 million, and for others now opening up in Labrador it was \$400 million. If you take money at 4 per cent, and even with the terrific speed they have developed there you cut down your time to 3 years, that would be \$50 million interest between the time you started to develop the project and the time you got some return; and this allowing companies to operate for 3 years tax-free has been a terrific boom.

The only thing we feel is that it is not too much to suggest that this be widened slightly. Take for example a good mine that opens and runs for about 20 years. Now, for instance, the price of gold is still \$35, the same as it was in 1932, so that we have

only three of our 23 gold mines operating in British Columbia.

Supposing something happens, however, and the price of gold goes up. Many of those mines have been abandoned for years, and if they were reopened they would not qualify as new mines. The same applies to lead, which for years was worth 3 cents a pound. Many of the mines were worked out on that basis. But you have an increase in price to say 14 or 15 cents a pound. Then 20 years afterward, or maybe 40 years in the case of some camps, they are reopened, and the cost of reopening is virtually the same as going in in the first place. So we would like to see a little broadening of this provision.

There are other technical details that I am sure you do not want me to deal with. There are such things as these, for instance. You just go to open up a mine and the price of copper or tungsten collapses, as it did at the end of the war, before you have had your 3 years. You have to close up. The shareholders in your company get nothing, and the mine is put in cold storage. We would like, in short, to see it smoothed out and acted upon. I can assure you that going to the United States, as some of us did, was something of a revelation to us when we saw how intelligently this was being done there.

Along with this, we think the dominion government have been extremely wise in not taxing capital gains. I think you all realize that it always makes news and it is very thrilling when a prospector finds something and he gets \$100,000 in cash for it. On the other hand you do not hear about the thousands of prospectors who strive for years and do not find anything. One of the lures that keep him going is the thought that if he does find something, it will not all be taken away from him by a tax on capital gains. I feel that the country as a whole has benefited by this, and the British Columbia and Yukon Chamber of Mines think this is a wise move and it should be continued.

Mining development anywhere needs good transportation. We stress this on two fronts, the roads and trails and also the railways. First we have the roads and trails. Some of these matters would seem to be entirely provincial. However, we have the precedent of the trans-Canada highway, and we feel that it would be in order for the dominion to consider going in with the provinces on some system of assistance, because we feel that the dominion does reap considerable reward when a new mine comes in, like Cassiar Asbestos or Killarney Lake. The dominion will reap a tremendous reward; and in the case of the Yukon it is part of their jurisdiction anyway.

A main road from Hazleton to Atlin would, we think, be of some strategic value. It would be a great tourist drawing card which would make friends and influence people south of the line; and we think it would be entirely proper in that kind of case to assist the province in its road and trail programme. We have also felt that the Canol road is far too big an asset to be allowed to fall into even partial disrepair. Already several important mineral discoveries have been made adjacent to it, and we feel that this road should be kept up, even though the original purpose for which it was constructed is no longer valid.

We also feel that it might not be a bad idea, and the cost being very small compared to most of the other requests for money, to keep up one or two of the main trunk trails in places where roads cannot be justified at present, and where air access is not easy. Take a place like the Tweedsmuir area. Twenty years ago we had tourist parties going in there on a magnificent trail. The people who went in there never failed to take the news back of what a great place this was. We now have one or two nice looking prospects there, but you cannot get in any way, except by air or by a round about way by way of Burns Lake. We maintain that the tourist industry and mining

would get very adequate returns from these trails, but at the present time they are nobody's baby, and our trails are worse by far now than they were in many cases 50 years ago.

Assistance to the railroad is another very touchy problem, and I am sure the British Columbia and Yukon Chamber of Mines have worried about this a great deal. There is always a tendency to call on the public purse every time you want something; but without going into it fully, we would like the dominion government to consider the possibility of at least a survey of the practicability of extending the P.G.E. from Prince George to Watson Lake. This is one of the best routes geographically, and it would make it possible for these new discoveries in the Yukon to be looked at in an entirely new light.

At the present time you find a good property, and you are faced with the transportation problem which makes anything but the richest ore most discouraging, to say the least. While we are not prepared to say that this is justified at the present time, we feel that a survey should be made and that it should be assessed as a long-term possibility for stimulating and developing our northern country.

We also feel that the dominion government -- and this I understand is a hot potato -- should consider the possibility of assisting the P.G.E. into the Peace river area,

where we have tremendous resources of natural gas and coal and the possibility of setting up an industrial empire in the interior, which will never be done until we have that rail connection.

The tenth point on which we feel strongly -- we feel strongly about all of these; I do not know which one we feel most strongly about -- is the feasibility of a smelter on the coast. People who are not in the mining business do not realize that if you find a zinc mine, for instance, anywhere on the coast of British Columbia today, you practically have to go half way around the world for a smelter. The two nearest ones for zinc are at Kellogg, in Idaho, and at Trail. Both these have more than they can handle.

To give you an idea of the economics, until the last year we actually had the condition at Slocan, less than 150 miles from Trail, where they could get a better return by shipping their ore by rail to Vancouver and by the Panama canal to Belgium than by shipping it to Trail. Trail have their own mines, their own sources of supply, so any time they do treat other ore it is just out of the goodness of their heart rather than in the hope of making a profit. Techniques have changed a great deal, and we feel that the time has come to reassess the possibility of a smelter on the coast, not

only for zinc but also for lead. We have cheap potential hydro; we have an ocean at our door, and I'm darned if we don't feel that we can do as well as the Belgians and the Germans in importing ore, as they do from all around the world.

MR. GRAUER: Would it matter where the smelter was located?

MR. WARREN: We would like to choose some suitable place where you can deliver nice, cheap power for us, of course. What we have asked for in this case is that the thing be considered. In some quarters when you bring up the idea of a smelter on the coast they say well, we have had a smelter, and it closed down. That just means we were a little overoptimistic 50 years ago, and that what was not practical then is practical today. We feel, as a matter of fact, that there is something like 200,000 tons of zinc concentrates coming out of South America and going to the United States for smelting. We think if we can produce the power, with the technological knowledge we have we could get a very nice share of that business.

MR. GRAUER: It is a long coast line, and we have had this proposal put up to us from several quarters. I take it that as long as it is on a deep sea location, with cheap hydro, it does not matter much where it is. Is that the idea?

MR. WARREN: Well, we would like to have a nice townsite as well. We are not prepared to recommend where it should be, but we do feel that this is worth going into.

THE CHAIRMAN: Are you satisfied that there would be enough concentrates to justify it?

MR. WARREN: We are satisfied that there is enough. I am not at liberty to produce the information, because it was not collected by the Chamber of Mines, but it has been collected and is available in the province, to show that we have enough potential ore, ore in sight and material which we might attract if we had a smelter, coming from South America. The tonnages have been worked out, but unfortunately the work was done under contract by another research body and I have not the authority to release that information. However, I can tell you on my own responsibility and that of the British Columbia and Yukon Chamber of Mines that we are confident a small smelter or zinc plant could be supported on the coast. Britannia at the present time have to ship their concentrates all the way into the interior.

The next point I am sure will make you smile, because probably you have had this given to you all across Canada, but we feel it is important. We would like the dominion government to try to bring about a higher price

for gold.

THE CHAIRMAN: As a matter of fact I think this is the first time we have heard this suggestion, and we would like you to be a little more specific as to how this could be accomplished.

MR. WARREN: Well, we have felt that when the government pays, as it does, a relatively few million dollars by way of the gold mining assistance act, they get in exchange for that some \$150 million worth of gold which they are still able to use as international exchange. As far as I know the United States will still buy gold or take it in exchange at \$35. Am I correct?

THE CHAIRMAN: Yes, but I suppose if we started to subsidize any particular industry to a very large extent we might run into some problems. I have no reason to say that; I do not know anything about it.

MR. WARREN: We feel that for that few million they put out they get \$150 million in foreign exchange, and that is probably the least harmful way of getting foreign exchange we can imagine.

The point in connection with the gold mining industry is that gold has been the opener up of many areas in Canada. Gold is a product that can be found by prospectors when they are comparatively inexperienced, and it can be developed readily. We are probably as

good gold miners as anybody in the world.

If it were just the gold itself, the foreign exchange, I think it might be hard to maintain that the subsidy was justified, but think of all the other camps that have followed. I do not know whether you would agree, but I would think that Kirkland Lake and Porcupine, quite apart from the gold they have produced, played a substantial part in getting the Ontario Northland Railway in there; and having the railroad made Noranda, Rouyn and all those other camps possible much earlier, in their discovery and development, than would have been possible otherwise. The development of the Canadian National northern route through Amos and the development of the gold mines at Val d'Or, I think, must have given an assist in the finding of the big lithium mines which are being developed at the present time. If the gold mines had not been there first, there would not have been transportation facilities that would have enabled that country to be opened up.

More than that, I do not know if I dare associate the Chamber of Mines with this, but I think it is our thinking that the price of gold will probably be raised, because it still has a useful function. But with gold mining camps, once they are abandoned it is very difficult in many cases to open them again. It takes an extraordinary stimulus to open them

up a mine closed for 20 odd years.

Take a mine say in the Cariboo district, which has been kept open and is now being further developed. It is providing a market for the farmers who are opening up that country. They are developing water power in there. They are hoping to find other big mines in that district. Many companies are spending money there, so the small cost of keeping these gold mines active is more than repaid by the individual benefits obtained.

At any rate we would not like to see this gold mining assistance act cut any more. It was cut a little this year, which was very disastrous for a few mines, and we feel that perhaps the government could see its way clear to do what we would like to see done; that is, increase the price of gold. I am surprised that the Ontario Mining Association have not said something.

THE CHAIRMAN: We have not been there yet.

MR. WARREN: That would explain it, then, because I am quite sure that British Columbia is not alone in having gold mines that are going through very hard times.

MR. GUSHUE: How does the emergency assistance act operate?

MR. WARREN: It operates in the sense that costs over the fixed price are bonused

up to a certain amount. I cannot give you the exact details, but there is a base price, and when the base price of producing an ounce of gold goes above that to the satisfaction of the department, then they pay a small amount of the extra cost. So it acts as a bonus for the higher-cost producing mines, provided they are legitimate gold producers.

MR. GUSHUE: I have never found any gold, so I do not know.

MR. WARREN: Well, it has been a godsend for a few mines, and in British Columbia this is a very serious thing. We had 23 operating gold mines at the close of the war. We have 3 operating today, and the fact is that gold is so often associated with other things. Gold is the easiest of all to find, and once you get a road into an area the prospectors start looking for other things. In British Columbia, take Sheep Creek; that camp was probably just a gold camp, and out of that we have the biggest tungsten mine in Canada, and the possibility of opening up some very nice zinc mines, all because they came in there for gold, got the roads and transportation, opened up the country; the geological survey went in and so on. So gold is something more than just an individual mine; it is a long-term proposition.

The next point we deal with very briefly, because I am sure others are dealing with

it more in detail, is that we want to draw attention to the need of encouraging more manufacturing plants, using our own raw materials. We feel it is rather a tragedy that we produce so much aluminum, copper, zinc and so on, yet most of the zinc die casting and a great deal of the other materials are processed elsewhere. We realize this cannot be done over night. We do not expect miracles, but we do think steady and consistent efforts should be made on our part, and we would like the dominion to recognize the need for this.

I think our thirteenth point is most unhappily placed, because it is the most important thing of all, probably. That is, we in British Columbia, and the British Columbia and Yukon Chamber of Mines, feel that an iron and steel industry is of vital importance to the Pacific northwest. We feel that no country has ever become well industrialized without an iron and steel industry. It is the backbone of any major development. We have had abortive attempts and promises for over 50 years, but at the present time our iron and steel industry, as a major industry, is conspicuous by its absence.

We are told that this is partly because our ore is non-existent, that we do not have enough of it. This we challenge. Two or three of the major United States steel companies

had their men up here for years making studies of the iron ore deposits, and we have every reason to believe that while we have not developed or staked out large amounts of ore, we have considerable amounts which will be added to materially, and I think it is significant that at the present time, in spite of this, British Columbia is shipping iron ore to Germany and Japan. If the cost is so prohibitive, how then can they justify mining this ore under contract and shipping it all the way to Japan and Germany, to be shipped back in the form of competitive finished materials?

We also feel that we have the possibility, with our cheap water power which we hope will one day be developed here, of attracting iron ores from the south Pacific. As you know, the Quebec Metallurgical industries have for some time been making importations of iron ores from the south Pacific, and we are hoping that with our cheap power and our abundant limestone on the coast, we will be able to do the same. May I say in parenthesis that surely if the salmon people are so alarmed over the prospect of losing their industry, and if they really believe their industry is worthwhile, they should spend more than \$60,000 a year, which is the total amount they have ever devoted in one year to research. I personally happen to be one of those who think we can have both

power and salmon, but I do not think we can have power and salmon when the dominion government sees fit to spend only \$60,000 a year on research on how to get fish over dams. I think it will have to spend a lot more than that; and of course we are indirectly very interested. We want to see this power developed, and we can see the point of view of the fishermen, but an article came out recently over the signature of Mr. Clay, one of the senior officials in the engineering institute here. They are doing good work, but on a comparatively small scale. Whether this is because of lack of money or lack of policy, I do not know; but I do think your commission might well suggest that power is going to be developed in British Columbia. It must be. No other place in the country has the resources we have, and they cannot lie idle forever. Since we have the salmon, surely we should spend more than \$60,000 a year to try to preserve them. If you want to get the authority for that, it is in the October number of the Professional Engineer, over the signature of Mr. Clay.

We have a much fuller report on the history of the iron and steel industry, and Mr. Campbell is here to deal with that if you have time when I have finished, because he is very much an authority on it. It has been his life work; he is a member of our executive,

and would like to say something about it. I would like to say, however, that it is rather awkward for us to pay \$25 a ton on steel coming in, as we did in the last war, and be told that our cost is too high, yet send a quarter of a million tons to Japan and another quarter of a million tons to Germany. It just does not add up.

Then we come to a subject that we do not think is contentious, but which we want to emphasize in your minds; that is, that we think the dominion government should take up the problem of obtaining corridors through the Panhandle. That is one of the things that is retarding the development of northwestern British Columbia. At the present time if a company takes its copper concentrates out to Ketchikan and ships them to Tacoma, to the smelter there, it will cost \$8 in freight. If that ore goes to Stewart and then down to Tacoma, it costs \$4 a ton. Any one of you knows that a handicap like that is the difference between success and failure, because if the ore goes between two United States ports, it must go in United States bottoms. Otherwise it can go in Canadian bottoms. We then have all the customs problems to get through; and anyone who knows the customs procedure realizes that it adds to the cost of producing the concentrate.

Another thing. Just last fall we had a strike on the United States section of the railroad running into the Yukon, and from September 9 to October 24 there was no traffic going over that road at all. Here were we in Canada, producing all these Canadian ores, yet we could not get any shipments at all because of a strike in another country.

We feel that there is not only legal justification for this request; we also believe we have a good example. May I quote from the original treaty when Great Britain disposed of this region. It goes back to February 28, 1825, and it is just 8 lines. I would like to read it, because I think this is something which is not always recognized or remembered. This is one of the clauses of the treaty:

"It is understood that the subjects of His Britannic Majesty, from whatever quarter they may arrive, whether from the ocean or from the interior of the continent, shall forever enjoy the right of navigating freely and without any hindrance whatever all the rivers and streams which in their course toward the Pacific ocean may

cross the line of demarkation
upon the line of coast described
in article 3 of the present
convention."

We are not lawyers, but we feel
that has some application, because when Britain
gave up that territory she maintained that right
of entry to the sea. When Russia sold Alaska
to the United States, she could not do the same
thing, because that was something she never
owned, and we should still have that right.

This land is not of any use to
the United States, because there is nothing
on it or in it. The minerals are to the east,
in Canada, and the water to the west is
international. But we have to go through this
tiny litte strip of land and go through all
these procedures, which is making operations in
northern British Columbia almost intolerable.
When we address ourselves to the minister we do
not get what we consider an encouraging reply
at all. We have taken it up with the Americans,
and we find that there are United States
senators who are quite prepared to agree that
some understanding, some 99 year lease or some
such arrangement, should be made to let us
get through this area. I am sure there is
enough goodwill now in Alaska and the northwest
to let our dominion government open

negotiations.

Those are the main points we wanted to bring forward. I would like to proffer some evidence to show that we can produce \$3,500 million worth of wealth. We think there is a lot more than that to come, and our reason is that we do not think the Almighty recognized the 49th parallel, and the interior of our coast range is very similar in geology to the great mineral producing areas of other countries. But the Almighty also called for tough men to go with it, because that area is covered with glacial drift, which those other countries do not have. They also have mountains, but they do not have the overburden. We feel that we have a man-sized job, but the geology is such that we have every confidence that when we get into it and we overcome the problems of topography and lack of transportation, we will make wonderful discoveries.

But we must have a favourable atmosphere, so people will know they will get benefits from their new discoveries.

There is just one other point, and I do not know whether it has been made previously. We do not like to see, in taxation schemes, mining just lumped with forestry. They are both big primary industries, but mining has three things that do not apply to forestry.

However carefully we mine, there is no way of making it perpetual. It is a one crop proposition, and you have to write off the capital cost. A forest, a fishery, an agricultural venture or a water power proposition can be written off over a long time and can be considered reasonably perpetual, but you cannot do that in mining.

The first thing our present government of British Columbia did was to lump and forestry together, and say, "Oh, here is some money; we will tax it," and the justification is that you have to go where the money is. We feel that mining must be treated on its own merits. Mining is quite prepared to pay its full share, but it does not want discrimination.

We would like to respectfully suggest that while government as a whole is spending more and more of its time and energy in the distribution of wealth, it might well spend a little more of its time and money in furthering the ability to find new wealth, in other words trying to make a bigger cake for everybody rather than worrying about the distribution of the cake. If the cake is big enough, the distribution will not be too difficult.

THE CHAIRMAN: Presumably the question of markets is fairly important in that regard?

MR. WARREN: Yes.

THE CHAIRMAN: And those markets are primarily markets in other countries. It is not just a question of stimulating exploration, it seems to me.

MR. WARREN: Well, so far we have not had the problem the wheat people have had, nor have we had the assistance they have had in looking after their surpluses. We happen to be living next door to the United States. That has its drawbacks, we admit, but they have been quite happy and anxious to take all the material we cannot use ourselves, and I think whether we produce 300,000 tons of copper or 500,000 tons a year, finding a market at the present time will not be our problem.

THE CHAIRMAN: Would you apply that also to lead and zinc?

MR. WARREN: As far as we can see, the world has not discovered a new lead field for 30 years, and our job will be to find more. I feel that if we make new discoveries the world will take all we can spare, although I would like to see us do a little more manufacturing ourselves. There may be periods of temporary oversupply, but the long-term picture is such that the world is going to need metals in ever increasing amounts.

THE CHAIRMAN: But you have to

gear production to a shorter term, do you not? Perhaps we should define what we mean by "long-term" I suppose.

MR. WARREN: Some of the mines we have had have taken as long as 25 years to develop. Some of them, like the Labrador deposits, were actually reported 50 years ago, but the time was not right for development until the present, so there is frequently a long period of time between discovery and production. But take the Cassiar asbestos.

Canada produces 65 per cent of the world's asbestos, and this deposit in British Columbia was brought into production very quickly. As far as I know the chief handicaps they have at the present time are transportation and finding markets for this high grade product.

MR. GRAUER: Markets for metals and markets for iron and steel would be two different things.

MR. WARREN: Yes, but I think if you read through what Mr. Campbell says, he has a point. Every American consumes in effect two-thirds of a ton of steel a year, and most of the major countries consume from one-quarter to one-half a ton of steel per person per year. When we had only 300,000 or 400,000 people in British Columbia it was hard to justify such an industry; but if we are to believe what we have been told, that

British Columbia can look forward to 3 million people before very long, at that rate they would consume a million and a half tons of steel, which is a tidy market.

It is more complicated than that, but we are a new and growing country, and we have the world at our doors. We do not have a freeze-up, with our ports out of use for half the year. So we have a beautiful, moist climate, which may be somewhat overdone at times, but it is nice to have the pleasant part of it. We think there is no reason why, if we buy from these people in the south, they would not buy our goods in return.

I think that covers the main points we wish to make. Mr. Campbell, who as I said has done a great deal in connection with iron and steel, would like to say a word or two about that.

THE CHAIRMAN: We would certainly like to hear his views, and I would like to take this opportunity of thanking Mr. Campbell for the brief which he sent to the commission some months ago, which I read with a great deal of interest. I would also like to thank him for the summary of the brief which he prepared and which we are planning on circulating to the other members of the commission to study.

If you would care to tell us

something about the prospects for the iron and steel industry here, we would be interested to hear from you.

MR. CAMPBELL: Thank you very much, Mr. Chairman. This will deal very briefly with some comments on steel.

Our strategic location suggests a steel plant based at least on the United States per capita consumption of two-thirds of a ton per person. This means an 800,000 ton plant, say 2,500 tons per day. This would be of the same order as the Sydney plant.

Yet we face the fact that regardless of agitation for 25 years, nobody will even build a 100 ton plant. In 1942 a 200 ton plant, with expansion later at low cost, could have been built for \$16.4 million, and would have paid \$2.1 million in gross profits. Yet though the war had started, we did nothing. We then paid out \$25 million in freight charges for steel for war purposes.

We have, or we could get, all the raw materials we need. Ontario built up a great steel industry on imported ore and coal. South Africa in 1934, with only 1,600,000 white people, built a steel industry that was paying dividends in a few years, and in 1950 produced 600,000 tons of steel at a cost of £9 million less than it could have been purchased for, even if it had been available. They have steel plants in

Mexico, Colombia, Peru and Chile. These are what we call the backward Latin-American republics; yet they are forging ahead while British Columbia not only does nothing but is shipping its ore out as fast as it can. Last evening's Province states: "Few people realize the extent of the vast flood of iron ore that is being shipped from the mines at Campbell River and Texada Island to feed the insatiable mills of Japan and Germany."

We also have a coal problem in Canada, with no solution in sight. An iron and steel industry offers a solution. For every million tons of steel about $1\frac{1}{2}$ million tons of coal is needed.

When the mining industry produces the refined product, it has done its part, and it is then up to the manufacturing industry. In 1943 its policy was that Vancouver's main and basic future is in port trade and primary industries, not in secondary industries. It has therefore been left to the Germans at Port Moody and to the British at Annacis Island to lead the way in treating mineral products, mainly.

We are told that industry is moving to British Columbia. I think Mr. Graur might recognize that sentence. I would like to put this in another way. For every ton of ore exported and every corresponding ton or its equivalent being imported, industry moves out to

this extent. We get \$7.50 per ton for ore exported, and pay \$132 per ton for rolling mill products imported. At the present time the unfavourable balance in iron and its products in Canada is \$100 million, not yearly but monthly. For every man employed in producing ingots, say, at Kitimat, we are told by Mr. N.V. Davis, president of Aluminum Limited, that 100 are employed at United States fabricating establishments. General Motors alone, treating Canadian metals in part, employs 500,000 men, or four times the entire Canadian mining force.

This twentieth century belongs to Canada. That is the story; but the prospects are that particularly in regard to mining we are likely to go down in history as the great prodigal of the twentieth century.

The Pacific Great Eastern is now being connected with the Peace River. Half a century ago Laurier, dealing with the National Transcontinental, said, "The business of the road will be created by itself." It did not work out that way, and we do not wish the P.G.E. to have the same tragic history. Why not plan for the P.G.E? Why not have a steel plant at Squamish? The coal, ore, limestone and the many other supplies necessary, with railway and tidewater connections, and the power line, offer an opportunity which is getting rarer and rarer. Plants for copper and other minerals could be

added at small expense. When you have a major iron industry there, and all the facilities you can provide a copper department or a zinc department as a small addition, and manufacturing plants would follow.

Close to Squamish are Pemberton, D'Arcy, Seton and Lillooet, admirably located in majestic settings. Why not reserve them all as far as possible and plan them as industrial and residential sites? We should have 250,000 people in the area between Vancouver and Clinton.

The individual to whom the twentieth century really belongs is Winston Churchill who said in 1945, in dealing with the economic prospects of Britain:

"Let there be no mistake about it. It is no easy cheap-jack Utopia of airy phrases that lies before us. This is no time for humbug and blandishment, but for grim and stark facts and figures, and action to meet immediate needs."

THE CHAIRMAN: Thank you very much, Mr. Campbell.

MR. GRAUER: I wonder if you could tell the commission something about the discoveries of various metals that have been made since 1923. Dr. Warren said that between 1898 and 1923 there had been no base metal discoveries. What has been the situation since then? As you are aware, our

terms of reference deal with the next 25 years, and what we would like to get is an impression of recent discoveries and the prospects for further discoveries during this period of time.

MR. ELLIOTT: We have this mining school at King Edward that is being conducted at the present time, with 458 persons attending. Through the efforts of this school many important discoveries have been made, one of the most important of the lot, of course, being Cassiar asbestos. It is, I think, one of the largest deposits of chrysotile asbestos in the world, a material that we could undoubtedly use to manufacture products in British Columbia.

Another deposit that is shaping up as one of the major copper deposits in Canada is the Grand Duke copper mine just out of Stewart, British Columbia, on the Unuk river. That was found by two prospectors and is now under development. Then, too, three other prospectors who have attended our school discovered this very important Killarney lake nickel-copper deposit in the Yukon Territory. It is undoubtedly a major deposit. I do not know that so far it is so large in size, but it is considered to be a very high quality ore, containing not only nickel but some platinum and copper.

As the result of prospecting activity in the Yukon in the last 5 or 10 years,

important deposits of silver, lead, zinc have been made by prospectors on the Pelly River off the Canol pipe line road; and of course United Keno Hill mine at Mayo, with which Dr. Smitheringale is associated, has opened up large reserves of high grade ore, the concentrates of which are being shipped to the Trail smelter.

Other discoveries have been made in the Yukon Territory, but probably it is a little too early to talk about them. Dr. Smitheringale might be prepared to say something, but I have heard rumours of discoveries of asbestos which are under development at the present time, but so far I do not believe there are any proved reserves of ore. However, the Hudson Bay Mining and Smelting Company are reported to have a very important deposit of silver, lead, zinc at the head of the Canol road just before you drop over the Divide into the Mackenzie River basin. It is, I believe, a very large deposit of silver, lead, zinc; perhaps a little low in grade so that it may not be operated today, but it is definitely a large reserve of silver, lead, zinc ore for the future.

Another one is that owned by the American Smelting and Refining Company on the Highland river in the Watson Lake area. I know the engineers for the American Smelting and

Refining Company do not normally talk about their business very much, but a few years ago they admitted they had at least in the vicinity of \$100 million worth of ore indicated in that deposit.

When I speak of ore I mean rock with mineral in it which will be produced some time in the future. At the present time metal prices determine whether or not it is ore; nevertheless that large tonnage of mineral, lead, zinc and silver, does exist there.

There have been quite a number of other finds made. I think the property of the Consolidated Mining and Smelting Company on the Taku river is turning out to be much larger than they expected. The mine at Fort St. James is closed now, I think perhaps not because it could not be operated at the present price if they could get a contract to sell it at \$3 a pound, which price exists today for quicksilver.. It is probably market conditions, and I think they are bringing in most of the mercury ore from Spain at the present time. There are probably other factors also entering into the mercury picture, and that is why that mine is not producing. It may be a case, too, that they are more inclined to give the business to Spain and Italy at the present time for certain reasons.

There are undoubtedly many

opportunities for finding new mineral deposits in northern British Columbia and Yukon Territory, and that is evidenced by the fact that no less than 40 of the largest mining companies in Canada and the United States are searching for new mines in the area at the present time. These are companies that have millions of dollars behind them. They are hiring prospectors, many of the boys attending our classes, and they are experimenting with airborne techniques of prospecting which may lead to new deposits. They are sending prospecting parties into the field every year, and every year that passes witnesses the discovery of some new deposits. Undoubtedly many of them, as Dr. Warren mentioned, are buried beneath the trees and the overburden.

There is a point there. It is very important that our forestry people in this province put no restrictions in the way of prospectors and miners, who have to strip off trees and overburden to get at their ore deposits.

As to just what reserves of ore we have in the north, I could not say; but I would not hesitate in predicting that there will be at least as much ore produced in northern British Columbia as has ever been produced in the southern portion of this province in the next 50 to 100 years. In the Yukon territory discoveries made in the past few years indicate

that many major deposits undoubtedly do exist there.

Recently they have made finds north of Dawson, in Yukon Territory. I think this asbestos deposit that Dr. Smitheringale has been working on is located north of Dawson. We do not know much about it, and I guess Dr. Smitheringale could not say anything about it; but it indicates that in that area, right up to the Arctic ocean, we know the geology is favourable and that there are many major deposits of metal.

The problem, of course, is transportation. Just how it will be overcome, I do not know. Our imagination runs a little rampant. We think about atomic power, the possibility of heating areas in the north country, providing power to work mines in these remote areas where we could not perhaps develop hydro power.

As for transportation, new types are being developed to haul much more equipment and supplies than ever before. All this opens up a new vista there for the young men who are coming along today, who perhaps in the next 20 or 50 years will be able to use these things to explore new mineral deposits.

I have generalized quite a bit. I do not want to be too general. We have made finds. We have definite facts to prove that

important mineral deposits are being found throughout British Columbia and the Yukon, and will be found in the future. I do not think there is any doubt of that, and our government authorities do acknowledge that fact. We of the Chamber of Mines of course are right in the heart of it. We talk to all the prospectors. We talk to all the company scouts, and we get a lot of inside information as to what finds are being made. I think it can be definitely established that we are doing very well, and that in the next period of 15 to 50 years we are going to do equally as well as we have in the past. I would not hesitate to say that we will do much better than we have in discovering new mines.

MR. GRAUER: In that area could it be said that it has been sufficiently closely prospected that outcroppings by and large have been located, and that from now on most of the exploration will be done by methods which will be able to locate bodies under the overburden; or is there still quite a field for locating outcroppings?

MR. WARREN: I would like some of the others to speak to that, but we think it is fair to say that between 80 and 90 per cent of British Columbia is covered with overburden in one form or another. The big, obvious, rusty outcroppings you can see 10

or 20 miles away; but the fact that people have been over outcrops and have turned them down does not mean there is not a mine there. Conditions change. The price of copper today relative to other things is pretty good; in fact it is quite good in the eyes of some people, while a price of 40 to 45 cents a pound is considered unhealthy by some people.

For years we struggled with it at 14 cents a pound. For some of our graduate students at Britannia it meant a raise in pay when the price went over 14 cents. If you double that and say 28 cents, it is still relatively good. But even if you had found an outcrop 20 years ago, you could not have done anything with it, but you can today. There are new techniques; perhaps Professor Forward will point out some of them to you. They are helping to make it possible to produce the minerals more cheaply than has been the case in the past. Then a property which has been discovered and abandoned may become productive again, so that these contributions of research will turn many of the old discoveries into new discoveries.

MR. ELLIOTT: There is one point I would like to emphasize just as an example -- and I am not drawing any particular attention to this area -- in the Highland valley area, which is a well known area which has been explored for 30 or 40 years, only in the last

2 or 3 years some of the promotional companies have gone back and stripped off overburden and uncovered deposits. As a result of that little bit of extra work, they are now in the process of at least indicating the possibility of a large tonnage of low grade copper ore.

It is that type of thing that I think we can look forward to for our future reserves of ore, in addition to the new discoveries which are going to be made. We see companies going back into areas like the old Phoenix camp, with which Charlie Campbell had a lot to do 40 or 50 years ago. The mines are there, but in many instances the prospectors and miners have to strip off the overburden to find them.

I would like to add that I do not believe all the mineral outcroppings in the north country have been found. I feel there must be many remaining. For instance, Grand Duke copper was found only 4 years ago, yet people have been going into that area for many years. The reason it was not found, I think, was that the main showing of ore was just visible, sort of at the edge of where the ice cap occurred. That is now turning out to be a very large deposit.

So there will be many more outcroppings found in British Columbia, and I think it creates a wrong impression to suggest

that all the visible outcroppings of ore have been detected. I am quite positive there are many, many of them that have not yet been found and are waiting to be seen by the eyes of man.

THE CHAIRMAN: Well, thank you very much, Dr. Warren; we are most grateful to you and your team of backer-uppers and supporters.

---Recess.

---After recess.

THE CHAIRMAN: Well, gentlemen, shall we come to order. Dr. Forward, it is very good of you to come here and give us the benefit of your experience and ideas about the future of your part of the industry. If you will sit or stand or do as you wish, you suggested you would talk for half an hour or so and then we might ask you some questions.

MR. FORWARD: I thank you, Mr. Gordon. I have come without any prepared brief, but rather a few notes on points I have set out here that I hope the commission may find of interest.

I appreciate very much the opportunity that has been given to me to comment on some aspects of the mineral industry in Canada. Initially the suggestion was made that I might say something about probable developments in the field of mineral processing in Canada over to next 10 to 25 years, and also the possibility of the evolution of new methods for processing in Canada of ores and concentrates, and the problems which may be encountered in the field of processing.

To that was also added the possibility of commenting on the effect that new process development might have on the economics of mining and perhaps a few remarks on the

application of some of the newer techniques that some of us have been interested in, particularly in hydro-metallurgy.

Rather than try to answer any of those questions or discuss them in that way, I thought it might be easier to speak in rather general terms. I would like therefore to present what I have to say in relation to some six topics, the first of these being the broad basis of the metal and mineral industries; second, the possible trends in treatment; third, energy requirements; fourth, our position in Canada vis-a-vis our friends across the line in the United States; fifth, the potentials of research, and finally a few words about education.

Now, in respect to the first, the economic basis of the mineral industry, I think it has been recognized for a very long time that any nation that hopes to be a great industrial nation must have available either within its boundaries or under its control a sufficient quantity of mineral materials. The principal minerals that are required are these: first, iron or iron ore; second, coal; third in the list that has been commonly used is petroleum, which represents energy of some sort other than energy derived from coal.

Those three are all obvious. The fourth material that any country needs is sulphur. Most of us do not give much thought

to sulphur, yet sulphur is the basis of all our chemical industries. The fifth one is an adequate supply of non-ferrous metals.

I know many people look at the economy of different countries, and perhaps think our own country has been developed as a result of the expansion of agriculture, or perhaps that our present position is due to geographic considerations. I think most people who have had much association with the industry, however, will agree that minerals have played a similarly important part in the development of Canada.

A few years ago, about 25 years ago, a mineral economist was considering the position of the various nations of the world as to the ability they might have at that time to make war, and the strategic metals essential to their ability to become great industrial nations. His analysis was simply this, that there are eight nations in the world that had that potential; three in western Europe, France, Germany and Britain, which have available either within their boundaries or under their political control a sufficient amount of these minerals I have mentioned. The next group were the Oriental countries, Russia, China and Japan; those were the Asiatic countries. The other two countries he listed were the United States and Canada.

None of the other countries in the world is considered to have the potential these eight countries have; and of course it is very gratifying to those of us in this country to realize that Canada is one of the eight great potential industrial nations in the world.

Looking back, however, through 25 or 30 years, I think it might be interesting just to analyse Canada's position in respect of the source and availability and the production of these minerals I have mentioned. Look at the iron ore situation in Canada over the last 25 years. Every ton of iron ore we used was being imported. There was not a pound of iron produced. As to coal, there was then as there is now coal in the western and eastern sections of the country, but most of the people used imported coal at that time. Of petroleum and other sources of energy Canada produced none 25 to 30 years ago. As for sulphur, at that time Canada's sulphur was going up the stacks of the smelters at Sudbury and Trail and Noranda and various other places, and we were importing sulphur from the United States. In non-ferrous metals, Canada was then producing non-ferrous metals to suit its own needs.

If we look at it in 1955 we can see quite a change, in that Canada now is becoming an exporter of iron ore. The coal

situation remains much the same as it was.

In petroleum, certainly the percentage of the petroleum required by this country being produced in the country is now much higher.

At Trail and Sudbury and many other places in Canada sulphur is being recovered and used, not to mention the relatively small amount being produced from natural causes; and in non-ferrous metals Canada holds an extremely prominent position.

I simply mention these facts to show the change that has taken place in the last 25 years. What can happen in the next 25 years we can envisage only as an extension of the self-sufficiency of Canada in respect of these materials.

In so far as treatment trends are concerned for coal or sulphur or petroleum, one cannot see too much difference in the ways in which coal will be mined or treated. I will say a little more about that later on.

Petroleum I am not concerned with at the moment in the matter of treatment methods. As for sulphur, there are some potentials for the production of elemental sulphur from Canadian ores. Again I will say something more about that. As for iron ore and the production of iron and steel, we still need iron ore and we need coking coals, and one does not see much difference in the way iron will be produced basically, once the iron oxide is available,

that is iron oxide minerals; and there is not much chance of any change in that.

But there is the possibility of some change in connection with non-ferrous metals, principally because the selling price of a pound of non-ferrous metal is very much higher than that of any of these other materials I have mentioned, but it is a little difficult to look ahead and just say what might happen. Rather I think one should consider that automation, a term that is being used quite frequently, in so far as it means better mechanical handling of materials, is certainly the direction in which one would expect treatment processes to go. And that, for non-ferrous metals, means essentially chemical processes. It is difficult to fully mechanize a pyro-metallurgical process; that is, where one has to handle molten materials. Valves and other items cannot be applied to molten materials. Consequently if automation is to be effective, it is going to mean using more chemical processes.

That involves the use of liquids at low temperatures. I have used the term "liquids" because that includes two kinds of liquids. One is water and the other might be anything in the way of an organic liquid. The use of water in hydro-metallurgical processes has been carried on for a very long time, of course; but some of the techniques that have been

under development recently, and since the opportunities to use water as a means of recovering minerals particularly is true in the case of non-ferrous metals, all the experience of that use -- there are very many opportunities to extend it in a number of areas in the future.

I will say a little more about this in a moment, too, but the second point is the use of organic solutions. That is a technique that has come into metallurgical operations comparatively recently. I cite particularly the use of what is called the solvent extraction process for the recovery of uranium, in which the compound is made soluble by the organic material combined with kerosene, and simply by mixing the solutions in a certain way and letting them settle, if you like, or using a separator type of unit, it is possible to extract uranium. From the organic materials we derive hydrogen, and the basis of all metal production. Most of this matter is sulphide and the oxides in some combined form, but the basis for metal production is reduction in some form, and hydrogen is the elemental material that can be used for reduction.

Hydrogen can be obtained by electrolysis or by the use of natural gas or from other sources, so there will likely

be a trend toward the use of hydrogen obtainable from these sources.

That brings us to the probable association of petrochemical products and organic products with metallurgical operations; and the formation of these metal-organic compounds offers a very interesting opportunity for the future. We in Canada are fortunate in that we have available resources to effect some of these things that may be done.

I said a moment ago that I would say a little more about iron and sulphur. Some mention was made a little earlier about iron ore reserves in British Columbia. I think the principal iron ore reserves in British Columbia are iron sulphides. The iron oxide material is also there, but the very large reserves are those in which the iron is combined with sulphur in the form either of pyrotite, as in the tailings at Kimberley, or in some of the other deposits known up the coast, where the ore occurs in association with sulphur and with small amounts of copper and other materials.

Some of these hydro-metallurgical methods present an opportunity, which will be improved as more experience is gained in the techniques of treating these ores in such a way that both iron and sulphur will be recovered, either by roasting the ores first to make sulphuric acid, or perhaps by producing the

elemental sulphur first from the ore, which then can be reduced to make pig iron. So there are some opportunities there that will be perhaps followed here in British Columbia as the need for iron ore grows within the next 25 years.

These processes, the hydro-metallurgical processes I have mentioned, are similar in many respects to the process that was worked out for the treatment of the Lynn Lake ores in northern Manitoba. I do not want to take any time to discuss that, but I would like to pay tribute to the man who was basically responsible for some of that development. That is, the process that is now in use in treating the Lynn Lake ores of Sherritt Gordon was developed about 1948; and the reason it was developed was that the mine was then located some 45 miles from the end of rail, away off in the bush; and in discussing the potentials of the mine the president of Sherritt Gordon said that he knew, and everybody in the field knew, it was quite possible to mine and concentrate the ore and smelt it and produce nickel in the normal fashion, but he did not want to see a plant built that would be obsolete the day it started operating. Consequently he was prepared to start research and to study any possible way of producing the nickel that had not been used before, which

they could apply and which would be more economic. It was as a result of that attitude, which is a very important thing in my opinion, that the people who worked on it had the opportunity to do that work.

The use of the processes involving the use of higher temperatures and pressures than atmospheric pressures, and the chemistry of solutions in this range at temperatures between say 212 Fahrenheit, the boiling point, and 300 to 350 Fahrenheit, and the water solutions, offer potentials, because the chemistry changes in that area and one can do things by using elevated temperatures and pressures that are not possible at room temperature or at room atmospheric pressures. These processes and techniques are now pretty well proven, and as more people become familiar with them I think they will be more widely used. Of course something a little similar to that has been used in the aluminum industry for a long time, but now that nickel and cobalt and uranium are produced in this way it can be extended to these iron-sulphur areas mentioned and to the arsenical ores, some of which contain gold; and it would be much more helpful if in addition to gold these ores contained cobalt. That is the real reason people mine it these days.

Now a word as to how this might

affect the economics of mining. To turn an accumulation of mineral into a mine is not altogether dependent, and sometimes depends very little, on improvements that are made in technology. There are really about three or four items that enter into that. One is the actual mining cost, if one is to look at a property as a whole. The second is the treatment cost; the third is the cost of transportation, and the fourth is the cost of energy.

In respect of mining cost, for small ore bodies it is difficult to reduce mining costs very much. For low grade ore bodies it is possible now and has been, of course, to mine them at very low cost utilizing modern mechanical equipment. Quite often in mining it is cheaper to make a big hole than a little one, but there is a certain constant cost in small mines that cannot be reduced much. Treatment cost can be reduced to the point where a further reduction in treatment cost is a very small proportion of the cost of operating the whole property. So while costs there can be trimmed in many mines, the opportunities are somewhat restricted. Transportation is an important factor. We heard this morning about mines located in remote areas. Transportation is an extremely important aspect of mining production; that is,

from the property to the outside world and to the markets; and of course low cost energy is important to both mining and to treatment.

This brings me to the next point I want to mention, and that is the matter of energy itself. We realize that in producing metals there is a certain minimum theoretical amount of energy necessary to convert the mineral as it is found into a metal, say in ingot form first, and of course additional energy to fabricate it. One cannot get beyond or improve this theoretical minimum amount, and that means that if we are to produce metals in Canada, and if we are to have metals available, we must have energy. Certainly in aluminum the amount of energy required is much greater than in the case of lead or copper. It varies with the metal, but a definite amount must be used, and the efficient use of the energy is an extremely important aspect of the problem.

When one looks at the energy resources, various estimates have been made in recent years of the amount of energy that man uses and that man has available. How much energy is available depends upon the cost one assigns to it; but the simple fact is that with all the known resources of energy, which include coal, oil, gas, hydro, solar energy, wind energy, wood and so on, excluding

nuclear energy, according to present estimates there just is not enough of the fossil fuels or hydro or solar energy to keep the world for another 100 years. Some people will say there is enough for 100 years but not enough for 200 years, but that depends upon how thick or how thin the coal seams are, how much oil and gas are discovered, how much hydro is developed and so on; but apparently there is a shortage of energy developing in this country as well as in other countries, although we are particularly favoured in some respects, certainly in respect to hydroelectric energy.

The point I would like to bring out is that in any of the estimates that are made of the energy that is available to man, again excluding nuclear energy, by far the greatest proportion of the potential B.T.U's that we have to use is in coal; oil and gas not more than perhaps 10 per cent of the energy, and even less than that is available in hydroelectric. We have to depend on coal for energy for the next 50 years, and it is going to mean giving a lot of thought to the business of producing and treating coal.

Hydroelectric energy becomes more and more costly. I like to think of hydro development very much like mining. People in mining go and develop the small, high grade mines first, and gradually get further off into

the blue and transportation and other problems become more acute; and in that respect the development of hydro resembles mining. The cost of hydroelectric energy gradually increases for that reason, that it becomes more remote and the more costly units remain to be developed as time goes on. With rising costs of construction the prospect of that cost being reduced is somewhat remote.

It looks as though during the next 25 years or so we must depend on oil and gas, particularly natural gas, to meet our increasing demand for energy; but we must not forget that coal is the basis, and that we are going to have to use more and more coal as times goes on.

How that is to be done I am not too sure. It seems to me that in respect of energy, the question of transportation comes to be more and more important. It is not much use, the way I am thinking in relation to the mineral industry, to have a mine in the Northwest Territories, and to have 5 million kilowatts available on the Hamilton river in Labrador. We have to bring the two together. Hydro is obviously tied to locations.

As far as coal is concerned, it may very well be that we can find better ways of mining coal. I do not say that anybody is going to get coal out successfully, or get

the energy from the coal successfully on a large scale by underground gasification or anything like that; but somehow coal has to be transformed into a form of energy, whether by gasification or liquifaction, that can be transported over longer distances to make it a more useful fuel. Possibly somebody will have to establish out west the mining of coal by liquid methods, as they mine salt or sulphur or some of these other things.

The one point I wanted to bring in here, though, is that nuclear energy has the advantage that it can be transported. It can be set up and established at an economic location; and I think having heard Mr. Elliott one can realize the advantage of having available low cost energy.

I think it might be interesting to mention the estimates that have been made in this connection. In Canada the total present electrical energy is about 14 million kilowatts, as far as I am aware, and the estimate is that within 25 years we will require something like 40 million, of which possibly 6 to 10 million may come from nuclear energy. At any rate it will be about three times the present installed load in 1980.

Some estimates that have been made in the United States, and which appeared just a few days ago, show that in the United

States the present installed energy is as follows: nuclear energy, zero; hydro, 26 million kilowatts; steam energy, 90 million kilowatts, or a total of 116 million. It is estimated that by 1980 nuclear energy will amount to 120 million kilowatts. In other words they expect there to produce as much from nuclear energy as is now produced in all the hydro and steam plants in the United States; and in the same period they expect the hydro and the steam plants to expand by a factor of three, giving a total installed capacity of something like 500 million kilowatts in 1980.

Those figures percentagewise are similar to what we might find in Canada. The figures I offered for Canada I think were presented by Dr. Lewis earlier this year.

The next point I would like to say something about is our position with respect to the United States as far as metals are concerned, and I can say only this: that somehow or other the mineral industry has a biological basis. It is not that the minerals can ever be reproduced, but the production of minerals is a human activity, and is guided to some extent by human needs. The total amount of minerals produced in a country starts at a very low level, just as an individual starts to grow rather slowly,

increases rapidly during adolescence, and increases in weight but not too much in height after he passes adolescence.

The other curve related to that is one that rises, with the mineral production reaching a maximum and then beginning to fall away. I am speaking now of the production of virgin metals in any country. This is a normal distribution curve which relates to discovery and other things. About 75 years ago Britain passed the crest of this curve of metal production. Their needs kept on rising, so Britain has been an importer of metal for 75 years. Perhaps some people in the United States would be surprised to learn that it has essentially and very rapidly become and is now, in the areas I have mentioned -- non-ferrous and iron ore -- what is called a have-not nation. The United States passed the crest of its mineral metal production in the non-ferrous metals between 10 and 20 years ago; in iron ore just recently, and the thing is that the consumption continues to rise in the United States, in this growing curve. The production is up like this and now begins to fall away, and that difference between the United States requirement for metals and its production widens very sharply and is growing rapidly year by year. This is a matter which certainly within the next 10 to 15 years is going to make itself felt

very much more than it has been felt in the last 10 to 15 years. The Paley report, which has been mentioned earlier, indicates what will be the position of the United States. It was written as of 1950, and it indicates that in 1975, if their consumption continues at the present rate, the United States consumption 20 years from now of the principal non-ferrous metals and iron ore will be of such magnitude as to be equal to the whole production of the world 5 years ago.

It is rather a staggering picture, and it means that the world outside the United States has to increase its production very materially. Certainly the world outside the United States will have to double its production in all the non-ferrous metals in the next 20 years if the United States is to have the metals it needs. It still is the biggest producer and consumer of all metals, but the point is that the gap has been growing there and will continue to grow in the next 25 years.

Why should one drag the United States into this? Simply because we are right next door, and we sit in a very favoured position. I think it provides Canada with an opportunity which by some means or other should be examined. Perhaps it places us in a very good bargaining position when it comes

to exporting metals to the United States, realizing that their need for these metals is going to grow. I know nothing about that; I leave it to the people who are familiar with those operations and with export trade in general, but it seems to me there is a basis for some rather interesting bargaining on the basis of whether or not Canada should export raw materials, raw metals, or whether we should insist, perhaps, that these be fabricated before they are exported. I think it is something we could look at very carefully.

I have spoken about energy, about the possibilities in the future in regard to treatment costs; about Canada's position as a possessor of the necessary mineral materials to make this a great industrial nation, and the needs across the line as well as in other countries. All these things are very fine, and we hope they will go ahead and that we can take advantage of them. But I come finally to the means by which we might accomplish at least some of the technical advances, and of course that is dependent upon research.

It seems to me that a policy of all-out research in Canada, and certainly in the mineral industry, is absolutely essential if the country is to continue to grow. Research is primarily concerned with two things. There is the scientific, applied, basic research, which

is simply the research for knowledge, while there is also the industrial research directed toward economic improvement and development, which is concerned first with the reduction of human labour, with doing things by machinery. When one considers what a human being can do, it is insignificant. The energy of a human being is completely insignificant, something about one-tenth of a horsepower. The principal thing a human individual can do is use his mind, not his hands and muscles.

The other main objective of research is more efficient use of energy. Those are basic aspects of research and apply no matter whether one is studying engineering or some aspects of physics or mathematics or whatever it is. Those are the things that research attempts to do.

The other point I wanted to mention is education. I have considered these potentials, but quite frankly from my observation research is going to do a lot, and it is only by pursuing research that one can expect to accomplish or achieve all these things. But research needs people, and my feeling is that our objectives in this field are going to be limited not by the availability of resources, or finding new mines or technical aspects of atomic energy. These are not the limitations. Whether we are going to develop is going to

depend on the people who will be available. That is the limiting factor, and we do not have the prospects of being able to provide enough people with the right education and background to do the job.

I think it is extremely important that we think about that and do something about it. I noticed in the newspaper the night before last an editorial headed, "Lack of Technicians Jeopardizing Future. Britain's Atomic Programme Hit by Shortage." It goes on to say:

"Britain's shortage of skilled technicians, plague of her industrial expansion, is now undermining her atomic energy programme."

Another paragraph reads:

"Several involved solutions have been advanced, but what remains is the fact that a solution has become a matter of urgency; that some method of loosening the treasury's control over salaries must be found."

This is trying to promote higher salaries for people working on atomic energy. Finally it says:

"Now the retail price of top grade coal is more than \$25 a ton, Britain's mines are far from producing what she needs and for the first time in history Britain is importing more coal than she exports -- and is still going short."

That is a condition which I relate very closely to the shortage of people with adequate training. I believe an extremely important aspect of our future economic development in this country is a close examination of and attention to the educational activities. It is a little difficult to suggest pat solutions for these things, but I believe one should look very carefully at the high schools. Perhaps we should look carefully at the educational system they have in Britain, whereby at age 11 plus or so people go either to the grammar or technical school, and the people going to the grammar school get a much more rigorous training in mathematics and science than people going to other schools.

I think we have to look at the advisability of doing that, and encouraging students who are interested, first to develop their interest by public information, by any publicity possible, but to encourage the

better students and challenge them by offering in the high schools courses that have a lot more meat in them than many of the present high school courses have. I think people are a good deal like manganese steel. It is a rather unusual material, out of which they make these dipper teeth on the big steam shovels. If those dipper teeth are working in hard rock, through hard, difficult materials, it actually hardens the steel, whereas if you took the same dipper teeth and put them through sand, it would wear the teeth away.

I think people are a good deal like that. If you give them something to work on you will develop qualities in them which otherwise would be lost; and I look on that as being a challenge to the minds of young people in the high schools. I would like to see mathematics, science, physics and chemistry made required subjects for every boy, at least those in the highly qualified groups, up to at least the matriculation level. By that I mean they should be given a good, solid grounding in mathematics, the sciences and so on in the high schools.

I make no apology for stressing science. My belief is that technology itself is a culture, and it has been shown that where countries have a high technological development, people are happier; they are better adapted

to many other things, and oddly enough the birthrate is a great deal lower. . I do not know how that can be explained, but it is an accepted fact.

The second development I would like to see -- and here I am speaking for myself alone, of course, as in all this -- is a very considerable expansion in this country of the technical institute. By that I do not mean the technical schools, but institutes such as Ryerson and the Calgary school, and I think there is one at Haileybury and one at Sudbury and another at the lakehead. Their work was described several years ago by one mining engineer, in mentioning Ryerson as training the non-commissioned officers of industry. I do not know what the numbers are now graduating from these schools, but I believe that to maintain our industrial activity at the level it should be in the mining industry as well as in all others, there should be between 3,000 and 4,000 a year graduating from these schools and becoming the foremen, the superintendents, the operators. They are not necessarily professional people, but they have a background of training in some industry. Perhaps it is the leather industry, the baking industry or the painting industry, but they have a background that makes them extremely useful. Somehow or other that activity should

be expanded very considerably in Canada.

In so far as the universities are concerned, one rather interesting aspect of university education in the mineral industry was revealed in a little survey I made three or four years of people in the third and fourth years in mining, metallurgy and geology at the University of British Columbia. There were, I think, about 105 students in those three groups in the two years. I found that only five came from Vancouver high schools. They came from almost every small town in British Columbia and the other provinces, but only five from the Vancouver high schools; whereas in the University of British Columbia a very large percentage of the students come from Vancouver. It appears as though the people, particularly in mining and geology, come from smaller towns, and it may be that we must find some way to encourage the people in the smaller towns, who know life in small towns and like it, to go into courses in mining and geology.

At the present time the defence council and national research board support universities in their graduate training work, but I really think the universities should not have to, let us say, sell the idea to anybody that they should be urged and encouraged and supported in the expansion of their graduate level work, which is the basis for research

because the graduate students are the people who are the research workers of the future.

One thing one must recognize in many of these programmes where there is a departmental imbalance -- and this applies to high schools and technical institutes and universities -- is that the people who are teaching in these institutions generally are doing so because they like that life.

Sometimes, as is happening in the United States at the present time and to some extent in this country, industry wants certain things very badly, and they go to the universities to get the best people they can find. That is just killing the goose that lays the golden egg. I believe some further incentive must be afforded to teachers and instructors in the technical institutes, to encourage them to stay in the profession and not all move out into industrial jobs.

Well, I feel that this matter of education is not a question of one school, one small group, one school board or one university or one province. It is a national problem and should be looked at in that way. There should be much greater national recognition and support than now appears feasible.

Mr. Chairman, I have attempted to present very briefly some of my views on

these topics. I feel that productivity in our mineral industries, as in others, is an extremely important aspect of Canadian life; but my feeling is that it is going to be limited and cannot be fully achieved unless we give very considerable and serious thought to where we are going to find the people to do the jobs.

THE CHAIRMAN: Thank you, Dr. Forward. I am sure all the members of the commission would wish to join me in saying that this has been one of the most interesting and valuable presentations we have had during the course of our sittings. It is helpful to have somebody come and sketch things for us in broad terms, which is the function this commission has; and certainly from my point of view this has been a very stimulating and interesting talk you have given us.

MR. GRAUER: I wanted to be clear on your ideas about the future of coal which, as you indicated, is the most plentiful source of energy outside of the nuclear field. It has been represented that the future of coal probably is as a raw material for the chemical industry. In your reference to the rather rapid development that is expected in the nuclear energy field, do you see coal being pushed out of the energy field, as it is currently, into the field of raw material for

chemistry 20 or 25 years from now?

MR. FORWARD: No, not in exactly that way. As far as we are concerned, a very important part of the coal that is mined is used in making pig iron. Say there is a production in the United States of 100 million tons of pig iron per annum. That takes roughly 100 million tons of coke, which is a considerable part of the present production of coal. As far as anyone can see, in the next 25 years people are still going to make pig iron, and they are still going to require coke. It is simply another way of using the energy which is in the coal. It will be used, but not for the production of electrical power or energy of that kind.

That is one part of it. What I would hope to see in connection with coal is that the definite amount of energy which is there is converted to a gaseous form, perhaps, in which it can be more readily transported. I have the feeling that temporarily at least the oil and gas reserves present more easily transportable and more readily useable forms of energy but that in time, say within 25 years, when those reserves are perhaps becoming somewhat depleted, the coal will begin to rise. I would think it would be a very useful contribution to the economy of 25 years from now if very serious

thought were given to coal research, to methods of lower cost production and such things, to enable it to compete with materials which perhaps then will have become more costly.

I do not know whether that answers your question.

MR. GRAUER: Yes, it does. You made a reference to solar energy as one of the forms of energy of which we would need to take advantage in the next hundred years or so, plus a number of others. Has there been any really definitive study of the amount of energy we can get from the solar source?

MR. FORWARD: Again I do not know how accurate the figures are. One reads figures presented by one individual, and shortly afterward you find another person studying it with a different cost level in mind. One figure I have seen of an estimate that was made of the solar energy that might be available at a cost not more than double the cost per kilowatt hour, for instance, is that which would represent -- well, if coal were in the order of let us say 30 units, solar energy might be 500,000 units, available from that source. It does offer, of course, the greatest potential source of energy outside of atomic energy or nuclear energy, but the techniques of using that are still rather costly. It can be done, but it is

costly. That is an order of magnitude figure.

MR. GRAUER: Then there was your reference to the rather dramatic figure indicating that the United States consumption of base metals -- and I believe it included both ferrous and non-ferrous -- 20 years from now would equal the total output of the world five years ago. Twenty years from now what proportion of that United States consumption, approximately -- or has this been worked out -- would the United States be producing itself?

MR. FORWARD: I do not know that I can give you that offhand. I had some figures on that. Of course in pig iron usually the production and consumption are much the same, because pig iron and coal are things that do not move very far internationally, except this present movement from Canada to the United States, where it is convenient.

In so far as the other base metals are concerned, the percentage of production at the present time -- let us say that in lead the United States might use 35 per cent of the world's lead, and perhaps produce 20 per cent, or something like that. In aluminum the figures are somewhat similar. It is in the order that the United States uses between 30 per cent and 50 per cent of the world's metals.

MR. GRAUER: Right now?

MR. FORWARD: Yes; and assuming that percentagewise it would be pretty much the same, let us say that outside of pig iron they produce from 15 per cent to 25 per cent of the world's metals. They are still the world's biggest individual producer, but they produce from 15 per cent to 25 per cent, and that gap will probably widen in 1975. It is in the order of magnitude of 40 per cent to 50 per cent versus 15 per cent to 25 per cent.

THE CHAIRMAN: Thank you, Dr. Forward. Again I wish to say how grateful we are to you.

MR. FORWARD: Thank you. May I say how pleased I am to have had the opportunity of saying a few words today.

THE CHAIRMAN: The next submission is by Canadian Pacific Airlines, and I call upon Mr. McConachie.

MR. MCCONACHIE: Mr. Chairman, I think I should begin with an apology, first of all for my voice, which has not been up to par since last Saturday's game, and second for the fact that our submission, which we intended to submit tomorrow, is not in printed form. However, we have sufficient copies for the various members of the commission, and if you would like us to read this I have brought Mr. Keith along with me, my assistant, and he will read it if you so desire. Then I will be available if any questions arise from the submission, or there are any other questions you may wish to put to me.

THE CHAIRMAN: I think that is a very good method of procedure. We will mark the submission Exhibit 91. I may say that one of the members of the commission has been having the same problem with his voice since Saturday. I assume you both cheered for the same team.

MR. MCCONACHIE: I think so.

MR. KEITH: While it is understood that the scope of the royal commission investigation will encompass the next 30 years or more, it is not considered that a projection of the air transport trend beyond a 10-year period

would be valid. This is because revolutionary power units, such as rockets, and other technological improvements will exert a drastic but unpredictable influence on air transportation after 1965.

Since the commission will have submissions and testimony from other carriers competent to forecast the trends in their respective spheres, this brief will be concerned primarily with the traffic prospects and related developments on the routes served by Canadian Pacific Airlines. These include a 10,000-mile pattern of northern tributary services in western Canada, and a 29,000-mile network of international routes linking Canada with Hong Kong, Japan, Honolulu, Fiji, New Zealand, Australia, Mexico, Peru and Holland.

A brief description of the domestic route pattern may be helpful in relating the forecast air transport developments to the broader survey of the Canadian economy. From the Winnipeg base, a regular air service links Dauphin, The Pas, Flin Flon, Lynn Lake and Churchill, carrying military traffic as well as men and materials for mining communities.

On the prairies, the service between Edmonton, Lloydminster, North Battleford, Prince Albert, Saskatoon, Moose Jaw and Regina is engaged principally in passenger, and express carriage. It differs in character

from the other C.P.A. domestic routes, being interurban.

Fanning north from the supply base at Edmonton are a number of air traffic arteries of significance to the progress of the northwest. They serve the radium mining regions of Uranium City and Great Bear Lake. They carry personnel and supplies to the oil producing area of Norman Wells, the farmlands of the Peace River country, the gold fields of Lake Athabaska, Great Slave Lake and Yellowknife. They serve the Yukon Territory and trace the northward course of the Mackenzie River to Aklavik on the Arctic delta.

Northward from Vancouver, the C.P.A. services parallel the coast to serve Port Hardy, Sandspit and Prince Rupert. A recent innovation was the inauguration of direct service from Vancouver to Terrace, which has rail connections to Kitimat.

The inland air route from Vancouver to the Yukon via Prince George and Fort St. John links at the latter junction with the daily air service northwest from Edmonton.

Between Vancouver and Calgary, a daily air service links the major communities in the Kootenay and Okanagan valleys.

Now referring to the tributary or northern air routes, traffic forecast.

During the next 10 years, according to current indications, passenger and cargo traffic may be expected to increase at the rate of 20 per cent per year. This means that the 1954 total of 86,200,000 passenger-miles on the C.P.A. domestic routes will have increased to approximately 640,500,000 passenger-miles for the year 1965.

During the same period, the cargo flow should increase from 1,491,530 ton-miles to just over 11,000,000 ton-miles.

Future aircraft. It is improbable that either pure jet or turbo-prop aircraft will be used on these routes during the next decade. This is because the stage lengths are not suitable to the economy of turbine-powered aircraft.

While restricted to piston-engined aircraft, however, these services probably will justify the introduction of larger and more efficient aircraft, although this, of course, will be dependent to a considerable extent on the provision of suitable airports and navigation facilities. It seems unlikely that aircraft larger than the four-engined DC-6B, 53 tons gross weight, will be justified on the northern routes during the next 10 years.

Rates. It is difficult to foresee any significant reduction in passenger

fares or cargo tariffs on the northern routes during the forecast period. An increased volume of traffic and the use of larger, more efficient aircraft should, however, offset the anticipated rise in costs and will provide passengers with improved service with no increase in fare.

The north-south air routes in Canada likely will continue to suffer economically from the strongly directional flow of cargo traffic and the violent seasonal fluctuations in passenger traffic.

A cargo rate of 45 cents per ton-mile in the Canadian north might appear to be out of line with an interurban cargo rate of 23 cents a ton-mile in the United States. Considering the virtual absence of southbound back-haul cargo on the northern routes, however, the operator finds his per-mile costs virtually doubled. Thus the prospects of reduced cargo tariffs on the northern route is not promising.

One solution might be in the introduction of a very large and specialized passenger/cargo carrier such as the Blackburn Universal, which has a gross weight of 67 tons and a 20-ton payload, but a purchase price of \$1,300,000. With efficient use of the Blackburn Universal type aircraft combining the passenger and cargo transport function, it is possible that a 25 per cent passenger and cargo rate

reduction may be achieved.

Ground facilities. Provision of additional landing strips and navigational aids in the north is of the utmost importance in the improvement of service and in the development of these regions. While initial prospecting and proving of a new area will have to rely on the float and ski plane, permanent progress will depend on the more efficient and less costly air service provided by the wheel-equipped aircraft using landing strips and navigational aids. This allows much greater aircraft utilization, since flying is not dependent on season, on daylight hours or on clear weather conditions.

It is suggested that a northern settlement with a population of 4,000 or more not served by surfact transport should be provided with a paved landing strip of 7,000 feet in length and with navigation aids so that efficient air services can be provided.

Now referring to the international air routes, traffic forecast. Present indications suggest that the growth of international air traffic on the C.P.A. routes will correspond to that on the domestic routes. It is estimated that cargo and passenger volume will increase approximately 20 per cent in each of the next 10 years.

This means that the 1965 total of

passenger/miles per hour. The Britannia airliner will produce 40,700 passenger/miles per hour. The Douglas DC-8 jet airliner will provide 65,600 passenger/miles per hour.

Thus, with full loads and high aircraft utilization, air transport costs would be reduced substantially with these new types of aircraft. Conversely, however, depreciation and insurance charges will be so high that aircraft idle time will be very expensive. One of these aircraft sitting on the ground will cost the operator \$5,000 a day or more. Initial cost of the Britannia is \$3,000,000 each, while the DC-8 will cost \$5,300,000.

While these bigger, faster aircraft will deliver much more in ton-miles or passenger-miles of transportation per hour, this in-flight efficiency probably will not be reflected in lower tariffs on the international routes.

The passenger and shipper will benefit by improved service, but the exceptionally high depreciation and insurance charges, the increase in costs, and the seasonal fluctuations in international traffic will conspire to frustrate any substantial fare reductions during this period.

Ground facilities. Traffic handling procedures and runway patterns now in

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Ground facilities. Traffic handling procedures and runway patterns now in

existence at the international air terminals in Canada would appear to be adequate for a few years yet, provided light plane activity is diverted to satellite airports. Present runway accommodation probably will be taxed to full capacity, however, when present traffic increases by 200 per cent.

There is an urgent requirement for expanded passenger-handling facilities at Canada's main air terminals. This is a problem which will become progressively more acute in the next few years.

THE CHAIRMAN: Thank you very much, Mr. Keith. You forecast a 20 per cent per year in both passenger and freight traffic, and on both your domestic routes and your international routes. Have you any idea in rough figures what that is going to cost in terms of capital expenditures?

MR. MCCONACHIE: Yes; it will cost about \$60 million in capital expenditures.

THE CHAIRMAN: Over what period?

MR. MCCONACHIE: The next 10 years.

THE CHAIRMAN: And of that, according to the present plan how much will be spent for aircraft in Canada, have you any idea?

MR. MCCONACHIE: For aircraft built in Canada?

THE CHAIRMAN: Yes. The \$60 million

is for aircraft?

MR. MCCONACHIE: That is right. According to our present plans, in the next 10 years we would not be buying any aircraft in Canada.

THE CHAIRMAN: That is what I wanted to find out. Now, I understand that you recently made some inquiries about the development of air freight in Australia. Did those inquiries lead you to believe that the same developments can be expected in Canada, or do you think it will go hand in hand with the development of the passenger services more or less indefinitely? Or have they things that we do not have?

MR. MCCONACHIE: Yes, they do. Their large volume of freight in their inter-urban routes, of course, comes about primarily because of their very inefficient railroad system. They have a change of gauge in what we might call each province, which means an unloading and reloading of freight. Therefore because of good weather, excellent flying conditions, good facilities and poor ground transport, it is a natural for heavy growth in air freight transport, which is not the case here. We have the opposite condition. We have good ground transport, good railroads; cars are shipped from one end of the country to the other without unloading, and of course the

airways cannot compete as well as they can there.

In their back country they have developed a scheme for bringing out backhaul freight. They had the same problem we have in Canada, that all the freight was going from the major centres out to the back country, as they call it, and the planes were returning empty. They decided they could grow beef in the interior and drive it some 150 miles to market. By the time they had taken a relatively well fed stock and driven it 150 miles, it had lost a large amount of weight, and the meat produced was not as good as when they left the grazing lands. So they evolved a system of carrying beef back out from the interior, in which the government sponsored abattoirs and also paid a subsidy on the meat so it could be brought back out.

That, along with the fact that the meat was of higher quality and the cattle had not lost 30 or 40 pounds in transit, as they did being driven, allowed them to work out a practical solution to their backhaul problem. As a result they have loads two ways under ideal flying conditions, and they have correspondingly lower rates than we have in this country.

THE CHAIRMAN: In this part of the country particularly the flying conditions

must be particularly difficult. I am thinking of British Columbia and the northwest. Do you expect that in future there will be developments which will make it easier to fly in fog and under the kind of conditions you are up against in this part of the country?

MR. MCCONACHIE: Yes. There are developments in hand today that will eliminate weather as far as a factor in flying is concerned, in the radar installations. We are going into aircraft that we will be taking delivery of in two years in which we will have infinitely greater reliability of service, and weather will not be the problem it is today.

THE CHAIRMAN: Will those kind of installations be such that they can be used in private planes, smaller planes; or are they very expensive?

MR. MCCONACHIE: They are very expensive and they are very heavy, and they would not be practical in anything but large transports.

THE CHAIRMAN: I expect that some of us were waiting as you read this brief to see whether you would have anything to say about the possibilities of expansion if you had access to other routes. Have you any views on that subject?

MR. MCCONACHIE: Yes, we have. We would do a considerable amount of expansion

in the international field. We feel that Canada has a golden opportunity to expand in the international field. People from most of the countries in the world want to come to Canada. There are groups coming from various parts of the world, and they do not like to be required to go through the United States for connections to their various countries.

In the international field it is a double-bladed effect, in that in international flying we can be quite competitive with any country, regardless of their wage scales, because in future the major expenses are going to be in the form of capital expenditure, so the influence of cheap labour and other things is not going to be the major factor in connection with international competition. When you consider that one airplane with a crew of five will produce the passenger miles of the Queen Mary, you begin to realize that the labour factor is not the major factor in this form of transportation.

In addition, one of the things we are all concerned about is the expenditure of money raised by taxes at home. A large portion, as you know, is for defence purposes. If we develop a large network of international aircraft, those aircraft and all those trained personnel that maintain them as well as fly them are available in a national emergency.

They can be called home in 24 hours from any place in the world, and are available to transport troops and supplies to any other place in the world.

For the defence department to provide a fleet that could be provided by international operations, and put them in mothballs -- because they could not use them, certainly, except in an emergency -- would be very expensive. In addition to that, you cannot mothball personnel and management; you have to keep them in training and practice. It keeps a large number of men tied up; it causes tremendous expense to the country, but they can be put usefully to work in this form of transportation.

Domestically we cannot look forward to that same set of conditions existing, because in the event of emergency certainly our domestic fleets would be busier than ever taking care of the increased activity and demand for transportation internally. Therefore it depends entirely on our international development as to how much we have in reserve for the transport of goods and supplies in the event of an emergency.

We in Canada are pitifully weak internationally. We are probably the last of the civilian nations of the world in capacity in international flying. Right today there are

only nine airplanes in Canada assigned to international flying, and this has come about because we have had a tremendous development internally in Canada and the carriers have been very busy getting caught up with the demands of transport internally after the war, and did not have an opportunity of turning to the international field.

Other carriers from smaller countries, in which they do not require air transport, had nothing to do but develop internationally, and as a result they have tremendous networks of international airlines throughout the world. A good example would be Holland, which has over 100 four-engine aircraft providing transportation throughout the world at a profit; exporting transportation, which employs in the neighbourhood of 8,000 highly trained, highly technical men. Canada can do much better than that if it uses the rights it has and exchanges rights freely on a competitive basis with other countries throughout the world.

THE CHAIRMAN: There is no trouble about the rights?

MR. MCCONACHIE: There is no trouble about the rights if you are prepared to say to another country, "We want to run into your country" and give them reciprocal rights; but you cannot say, "We are going to

run into your country but you cannot come into our country." You have to give them access to your country and you have to be prepared to compete with them, and I think Canada can compete.

MR. GRAUER: Is Canada prepared to say that?

MR. MCCONACHIE: To date it has been on the basis of whether the carriers involved were prepared to face competition on the particular routes.

MR. GRAUER: Are they?

MR. MCCONACHIE: Where?

MR. GRAUER: What about the domestic field, the longer runs, and this element of competition which you refer to in the international field. Is that an element that should be introduced into the domestic field, in your opinion?

MR. MCCONACHIE: In some cases, not all. Competition, of course, if it is warranted, is a tremendous stimulus to the development of any form of transportation, but there are some instances and some places where it is not desirable to have competition. But there are many instances of other airlines in Canada, I think, where competition would be a most desirable thing.

In northern Quebec it is a branch line operation, and you cannot run a group

of branch lines efficiently without trunk line connections. In other words if you had a transcontinental railroad with no branch lines, and had a series of other railroads running nothing but branch lines, your costs on your branch lines would be prohibitive. That is one of the problems we are faced with today in Canada, that we have no way of connecting up our branch lines.

MR. GRAUER: Would that also help in the international service, or is a trunk line across Canada quite so necessary then?

MR. MCCONACHIE: No, I think in the international service it would not be so necessary. What is necessary in international service is the greatest co-operation among the trunk line carriers.

I might give an example. From an international point of view it would not be necessary for us to run from here to New York if we could interchange equipment and run say Tokyo - Vancouver - Toronto - New York, and use the rights of both countries. The passenger does not care who is operating the plane as long as it goes from one place to the other. In that way you would be compounding the rights of the carrier on the Pacific with the rights of the domestic carrier to give the best service. That is a matter of co-operation, which I think can be worked out.

MR. GRAUER: To give a trunk backbone to your supporting lines, as you suggest, is there enough trans-Canada travel and freight to support two trunk lines?

MR. MCCONACHIE: Yes, there is.

MR. GRAUER: Is that with or without mail subsidy?

MR. MCCONACHIE: Without mail subsidy.

MR. GRAUER: I was interested in your 20 per cent rate of increase for passenger and cargo traffic. Is that a coincidence, or is there a relationship between the growth in those two fields?

MR. MCCONACHIE: That has been the history of it recently. We have had various groups analysing the growth of air transport, and it has come up through the air transport industry and the international industry that this appears to be about the growth of transport in general. Some will not have as much, but in other routes there will be more, and the average will be about 20 per cent.

MR. GRAUER: Do you find that with regard to, first, passenger traffic and, second, air cargo, there is much elasticity of demand in relation to rates? Does a reduction in rates substantially promote travel and freight?

MR. MCCONACHIE: Oh, indeed it

does; very substantially.

MR. GRAUER: On the question of the necessary expansion of airport facilities, with which you deal, how are we fixed here in the greater Vancouver area? We have the Sea Island airport, of course. How long will that area take us, how far into the future?

MR. MCCONACHIE: It will take us past the period we are suggesting here, past 1965, providing a satellite airport is made available for training and for military aircraft.

MR. GRAUER: Let us assume those two things; how far would it take us?

MR. MCCONACHIE: It will take us up to 1965 at least, as far as we can see at the moment.

MR. GRAUER: Do you foresee a time fairly soon, then, within 10 or 20 years, when we will need another international airport in this area?

MR. MCCONACHIE: Yes, eventually we will need another international airport in this area.

MR. GRAUER: Have we the ground for it?

MR. MCCONACHIE: No, I do not think we have, but there are studies going on of various sites, necessarily without too much publicity.

MR. GRAUER: Having in mind the

rather restricted area of land we have in the Fraser valley, with the mountains closing in on the north, is it any problem to locate another big airport?

MR. MCCONACHIE: It is a problem, but there are several sites that are being looked at.

MR. GRAUER: It is not an insoluble problem?

MR. MCCONACHIE: It is not an insoluble problem..

THE CHAIRMAN: Is there room for additional air lines in Canada besides the two larger ones? We know of Maritime Central in the Atlantic provinces. What are your views about smaller airlines operating in particular parts of the country?

MR. MCCONACHIE: Yes, there is a place for them and a need for them. They become specialists in their particular type of transport required in that particular area. In the large companies you lose the contact or the continuity of personnel in a particular area. One of the reasons we went out of the charter business, for example, at these different bases throughout Canada was that union agreements required us to accept seniority as a basis of promotion, subject to merit and ability being equal, and that is something which you can very seldom prove is

not equal.

As a result you would hire a man today, and he would be up at Yellowknife doing charter work. You would perhaps train him on what the different lakes were like around the area, where the reefs were, where it did not freeze up quickly in the wintertime, where there were currents which would give ice conditions which were dangerous; and before you had him finished training there would be an expansion of some other route in some other place which was more desirable from his point of view than Yellowknife and he would bid in the job and you had a new man. So we were having to change men as often as five times a year in a base where the success and safety of the operation depended on the personal knowledge of local conditions and local requirements.

THE CHAIRMAN: That would apply certainly to charter work, but would it also apply to scheduled routes in certain parts of the country? Maritime Central Airways is the one I am thinking of, and I was wondering whether there was a place where smaller operations could fit in, in other parts of Canada.

MR. MCCONACHIE: Yes, there is. We get certain types of routes which lend themselves to certain types of equipment. If

you have a multiple type of equipment in one company you are subject to a continual training programme, and you have a very much higher cost, because you do not just train your men on the airplanes in this base; they move on to the next base and upgrade themselves, which is only natural. As a result the larger companies cannot do local services as well as the smaller companies can.

THE CHAIRMAN: Would you think those smaller companies should be entitled to compete on certain of the routes?

MR. MCCONACHIE: Certainly they should. They cannot exist unless they do.

THE CHAIRMAN: Well, we are very grateful to you; thank you very much. We are sorry to have kept you waiting this morning. We will adjourn now until 2:30.

At 1 p.m. the commission adjourned.

--- The commission resumed
at 2:30 p.m.

THE CHAIRMAN: Shall we come to order? The next submission will be a brief submitted by a committee of Maritime unions, which will be presented by Mr. Jenkins, and which we will mark as Exhibit 92. I would like to say that we apologize for holding you up this morning, but the other submissions took longer than we expected.

MR. JENKINS: Thank you very much, Mr. Chairman and members of the commission. It is a great pleasure, I am sure, to have the opportunity of appearing before the commission. I think you will appreciate as we go along that I have not appeared before a commission before, and I feel, to quote the words of the Apostle Paul, that I come to you not with words of wisdom but in fear and in much trembling.

THE CHAIRMAN: Well, we have not been a commission before, so we are even. I do not know the Bible as well as you do, or I would have some quotation with which to reply.

MR. JENKINS: I shall endeavour in making this presentation to read some portions from our brief and add comments as we go along. After I have finished I would like to have another member of one of the

Maritime unions say a word, Mr. Jack Guest, of the grain workers' union. With me today also is our economist, Mr. Emil Bjainison.

At the present time, Canada's greatest claim to pre-eminence is as a trading nation, where, in recent years, in terms of total volume of trade, she has consistently held her own with nations that have many times her population.

As a great trading nation, however, Canada is almost unique in that we have virtually no deep sea merchant marine, and very little shipbuilding.

We have in the past demonstrated our capacity in both of these fields. A century ago we were among the world's leading nations in both shipbuilding and shipping. Only a decade ago we held third place among the nations of the world in both industries, and our Pacific coast shipyards established for themselves an outstanding record for shipbuilding efficiency.

Our shipbuilding, however, has declined to the point where it is now almost wholly dependent on a few defence orders. The Pacific coast shipyards which in 1946 employed 19,127 men, had dwindled by 1953 to 3,405 men.

It is our belief that Canadian shipyards can produce ships as cheaply as those of other nations, but that they cannot

overcome the handicap of having to compete with foreign yards which are subsidized by their governments, whereas ours are not.

Mr. Chairman and members of the commission, I might just add a little here in connection with our costs in shipbuilding here in Vancouver. At the present time the defence orders are primarily what are keeping the shipyards going. Without those defence orders it would be virtually impossible to maintain a crew of shipyard workers in the shipyards. Hence when an order comes up for a bid on a ship, or to build a ship, the employers have to figure on the basis of training many unskilled workers to go ahead and do that shipbuilding. The same goes for ship repairing. If we have a big repair job come in the city and there is no regular shipbuilding crew to handle that ship repair work, primarily that work has to be done by many unskilled workers, so to speak, because the skilled workers have gone digging ditches or doing other jobs in order to maintain steady employment. Therefore they are not available when a repair job comes in. That causes the cost to go up, with no blame at all to be attached to the shipyard worker.

The decline of the merchant marine has been even more spectacular. In 1945 Canadian-registered ships were carrying 50 per cent of the tonnage of exports loaded in Pacific

coast ports, in 1946, 34 per cent. In 1954, of 8,810,720 tons loaded, 1,011,572 tons were carried in Canadian bottoms. But if we eliminate cargoes destined for United States Pacific coast ports, the total of deep sea shipping amounted to 7,844,087 tons, of which 44,939 tons, or one-half of one per cent was carried in Canadian-registered vessels.

For all practical purposes, therefore, our deep sea merchant marine has faded out of existence. The reason here, too, would seem to be that Canadian operators, however efficient their operations, cannot hope to compete with foreign operators who are subsidized by their governments, so long as our own government recognizes no need for similar subsidies to our own vessels.

There is great advantage in many ways to a nation such as Canada, which is an exporting nation, in maintaining a merchant marine. We had the example just last year, when the shipping costs of wheat went from a low of \$50 a ton to a high of \$130 a ton in a very short time. Subsequently the government could not afford to ship wheat at that particular time, because of these exorbitant freight rates. Therefore the wheat shipment stood at a standstill during that period, while shipping was scarce.

There is, however, good reason

to be nervous about the future of Pacific coast shipping at this time. Forty per cent of the cargoes loaded in British Columbia ports, and 65 per cent of those loaded in Vancouver, in foreign trade, consist of grain and flour. This trade is very sensitive to changes in freight rates. While we do not have any figures of the anticipated rates, it would seem to be a reasonable assumption that the building of the St. Lawrence seaway will reduce the cost of eastward movement of grain, and will therefore reduce the shipment of grain through Vancouver.

We in the trade union movement, particular the waterfront unions, are very concerned at the present time over what effect the St. Lawrence seaway is going to have on shipping in British Columbia. We are of the opinion that the only solution to this problem is greater trade with the Orient. We believe there is a great potential trade to be opened up with the Orient, with which I will deal a little later on in the brief.

In addition, the shipment of iron ore to Japan, which two years ago reached a volume of nearly a million tons, has now vanished. Since we prepared this brief I understand that this particular contract has been renewed, and iron ore is once again to move to Japan.

Of the other major cargoes from

British Columbia ports, such as lumber, pulp and paper, etc. a very high proportion, 27 per cent of the total shipping, or about 45 per cent of the total including grain, goes to the United States, and therefore depends on conditions in a single market, a question about which we will have more to say later.

The future of the maritime industries of this area, therefore, and even of the economy of this area generally, would not appear encouraging if viewed within the framework of present trade conditions and policies.

On the other hand, we believe that the potential future of our country and of British Columbia in particular is very great. If our policies keep in step with our potentialities, the future can be very bright.

Now dealing with the need for maritime industry on the Pacific coast and in Canada, all of the unions represented here have frequently met with strong argument from employer groups to the effect that we have raised the wages and conditions of our members too high in view of low cost foreign competition, and that by doing so we help to undermine the maritime industries of this country.

Now we skip some and go to the next page. During the war, it was recognized

that Canadian west coast shipyards, despite our wage levels, were producing ships as cheaply as any in the allied countries. We do not believe that our essential ability to do so has changed.

What has changed is government policy. Shipbuilding and shipping are not competitive industries, since in all countries that seriously engage in them, these industries are maintained by government subsidies of one kind or another. In the absence of any such Canadian policies, foreign subsidies make the difference that keeps our Canadian yards idle. But once placed on an equal footing with foreign yards in the matter of government assistance, our yards could undoubtedly, by fuller utilization of facilities, reduce their costs to a point where they would again be competitive.

Just along that line, just south of the border we have a maritime policy which calls for 50 per cent of exports to be carried in American bottoms. If a United States ship has a repair job to be done away from the United States, there is a 50 per cent duty on that repair job. In other words there is protection for the marine industry in the United States, and I am led to understand that many other countries in the world have the same type of protection for their marine

industries.

In Canada we have absolutely none, and all we hear is the tremendous cost of shipbuilding over in some other country. We do not believe it is fair that here on the west coast of Canada in particular, where shipping is carried on between British Columbia ports by the Canadian Pacific Railway, they should go over to England to get their ships built. We heard the statement made this morning by Canadian Pacific Airlines that they are spending \$60 million on new aircraft, and that no cent of that money was going to be spent in Canada.

That is exactly the same type of policy, Mr. Chairman and members of the commission, that has been carried on in the shipping and shipbuilding industry in Canada, where a Canadian company, deriving its entire profits on these boats from the people of British Columbia on the west coast here, are going over to England to spend \$3 million or \$4 million, which could very well give the economy of our shipbuilding industry on the Pacific coast a tremendous boost.

On page 5 of the brief we have some statistics showing our dependence on the United States market. I will refer to the bottom of the page.

While we would not place undue emphasis on these statistical measures, we think

they do express and tend to confirm the common sense principle that if we place ourselves too much at the mercy of one market, we are likely to be subject to severe fluctuations of employment, as we have been in the past. But if we broaden our trade relations, and particularly if we enter into closer relations with markets which are not themselves closely interdependent, we can look for greater stability in our own economy.

It is from the same point of view that we would express some alarm over the increasing degree of United States ownership of Canadian industry. It is not that American capital cannot be helpful in developing our economy. As Canadians, we would prefer to see all of our industries Canadian-owned. But if that would mean retarding the development of our economy, it is preferable to admit foreign capital. The danger comes about when one foreign country gains a preponderance of control, particularly if that control makes our industries subsidiary to and dependent upon the industries and markets of that country.

We believe that this is proving to be the case in the British Columbia forest industries, for example, where millions of acres of our best forest lands are now owned under the forest management license system by subsidiaries of large American lumber and pulp

companies, and in our mining industry, where American capital is predominant. The fear is that where operations are conducted on both sides of the line by the same companies for the same market, that market will be supplied from the American side first, with Canada merely taking up the slack. A related danger about which we shall have more to say later, is that the Canadian operations will continue to be confined to raw material production with the processing carried out across the line.

I believe, Mr. Chairman, it naturally follows that if United States capital is invested by a large United States company in a Canadian subsidiary, if there is a depression or a loss of their markets, the Canadian company is going to be the one that suffers first. Certainly it is not going to be the parent company in the United States. We will have something to say about this later, in our recommendations.

THE CHAIRMAN: That has not been the case, of course, in the past to any extent that I know of.

MR. JENKINS: We will be dealing with that and giving some figures a little later on. We do not believe that at any time in history has there been such a preponderance of foreign capital in Canada as there is at this particular time.

From this point of view, it is a matter for alarm that in the last five years American direct investment in Canada has risen from \$3,146 million to \$5,939 million in the last five years. This is an increase of 88 per cent. Its significance can be further judged from the fact that according to the 1954 issue of "Taxation Statistics", the combined net worth of all Canadian companies amounted to \$16,048,248,000 in 1952. Thus the American six billion dollar direct investment indicates a very high degree of control.

The danger to Canada in such a high degree of dependence on one market is well illustrated in the remarks of Dean Lowell Besley of the forestry faculty at the University of British Columbia:

"Traditionally the United States has received most of Canada's export of pulp and paper: prior to world war II, more than four-fifths; during the war, only slightly less; following the war, an even higher proportion; and in 1950, 92 per cent. Lumber exports, however, have varied more between the two countries. For the ten years preceding the war, 45 per cent to the United Kingdom and 26 per cent to the United

States; for the six war years, 45 per cent to the United Kingdom and 46 per cent to the United States; for the four post-war years, only 30 per cent to the United Kingdom and 53 per cent to the United States; and in 1950 just 8 per cent to the United Kingdom and 84 per cent to the United States... Canada's principal competitors for the United States' market are that country's great domestic forest-growing and forest producing regions: the southern pines and the Pacific northwest... If the United States can increase its production by 10 per cent, it will need no Canadian wood."

You can see, following these figures through, that our forest industry, which is the very life blood of British Columbia could be in a very serious condition if this is allowed to go on.

Thus we have a situation where our biggest industry is largely controlled from the United States, is dependent on the United States market, and is in competition with the very same interests that control it. This can hardly be good for a vigorous development of our own industries.

The following table shows the extent to which the same situation exists in our other key industries:

		<u>1954 Production</u>	<u>1954 Exports</u>
Iron ore	tons	7,280,256	6,126,938
Zinc	lbs.	747,718,334	772,420,000
Copper	lbs.	599,851,280	407,082,000
Lead	lbs.	442,542,820	352,328,000
Newsprint	tons	5,984,000	5,550,000

		<u>1954 Exports to United States</u>	<u>Per cent of total output exported to United States</u>
Iron ore	tons	3,053,213	42
Zinc	lbs.	506,703,000	68
Copper	lbs.	197,670,000	33
Lead	lbs.	205,343,000	46.5
Newsprint	tons	4,866,649	81

You can see from this table that our economy is very largely dependent upon the United States.

All of the above percentages would be substantially increased if, in the case of the metals, they included the metal exported in partly manufactured form, and in the case of paper, if they included the export of pulpwood and wood pulp.

Even without such amendment, however, the figures show very clearly our

precarious dependence on the American market. In all the industries concerned the extent of American ownership is high, and therefore the danger exists that in the event of a fall in American demand, the Canadian production would be the first to suffer.

The current boom in capital investment in British Columbia has attracted a good deal of attention, and has created the impression in some circles that this province is being rapidly industrialized.

We would not minimize the importance of such development, nor would we deny the likelihood of even greater future expansion. Indeed, we believe that the abundant resources of this province hold the promise of a very great future.

However, we do suggest that the present tendency is to develop our resources as sources of raw materials, rather than as the basis for a fully developed industrial economy.

In the Kitimat development, we do have an example of British Columbia power being used to convert a foreign raw material into aluminum, which is a great deal more advantageous than the export of raw power. Even in this case, however, the final product is still a semi-raw material, which could in the future be carried to a higher stage of manufacture, if our resources are intelligently

employed and our potential markets developed.

On the next page we have a table showing our dependence in the pulp and paper industry on the United States market. It shows that since 1949, or between 1949 and 1954, the export of pulpwood and chips increased by 265 per cent; the export of wood pulp and screenings increased by 181 per cent, while exports of paper went up by only 67 per cent. If you follow these figures through, instead of Canada being developed as a powerful industrial nation, we are slowly becoming a nation of hewers of wood and drawers of water.

MR. GUSHUE: Are those figures for the United States or for all exports?

MR. JENKINS: That is all exports; but the point I wanted to stress there is the export of our raw materials in comparison with exports of the finished product. At the present time there is much discussion in the province of British Columbia concerning the Columbia river storage dam, where it is anticipated that a dam will be built to store water to run industry in the United States of America. Also our natural gas from the Peace river country is being piped over 600 miles of mountain and brought down, and a large percentage of it is going down to the United States to run United States industry.

We do not believe this is good for the future economy of Canada as we look ahead,

as this commission is trying to look ahead for the next 25 years. We believe these natural resources, and in particular our natural gas and electric power, should be utilized to the fullest extent for the advantage of Canadians, and we do not believe that this is being done at the present time.

According to figures presented to the public utilities commission, the gas that is coming down from the Peace river country is to be sold in Vancouver for \$2.10. I understand that same gas will be piped right along to San Francisco and sold at the same price that is paid for gas coming from the San Juan basin, for 54 cents a thousand cubic feet. If that is the type of thing we are doing I think there will be something seriously wrong with our economy before another 25 years have passed. I believe we should start taking a serious look at the situation right now.

The significance of this type of development for the future growth of population and domestic markets is apparent from the fact that the manufacture of pulp and paper from a given amount of wood provides about four times as many jobs as the production of pulp wood from the same amount of standing timber. The same relationship is, of course, true in much greater degree when the production of electric power is compared with power-using industries.

Now we deal with the question of markets. We have stressed above the need for maintenance and expansion of west coast shipping, the need to free ourselves from dependence on a single market, and the need to develop our secondary industries.

In doing so, we are well aware of the fact that the growth of manufacturing and diversification of industry in this area has been retarded by the small population and limited domestic market.

On the other hand, British Columbia is fortunate in being located on the sea and therefore in having access by water to the markets of the world.

The largest populations accessible to us, those of the great Asiatic nations, have in the past been relatively limited markets because of the extreme poverty of their people. India, for example, has been a poor market for lumber because her per capita consumption of that commodity was less than one per cent of that of Canada. Similar considerations would apply in the case of most of the other products we have to offer, and the situation of China is undoubtedly the same.

Both China and India have at times been good customers of Canada as far as their small markets permitted. China for many years was almost the sole market for British Columbia

herring, and at times purchased substantial amounts of our lumber. But neither nation was at any time in the past able to provide its people with even a tiny fraction of the Canadian goods they could have used if the means of payment had been available.

We believe that this situation is now changing, not only for India and China but for all of the great nations of Asia.

India is now completing her first five year plan, a relatively modest one which increased the national product about 12 or 13 per cent, and is now launching a second plan, aimed at a 25 per cent increase in output by 1961, with extensive development of heavy industries such as steel, engineering, power, transportation, etc.

While these plans are intended to make India more self-sufficient, and will undoubtedly do so, experience shows that industrialization of a country increases its foreign trade by broadening the range of its demands and simultaneously increasing its ability to pay.

I will not bother reading all this through, because I understand you have read the brief. I turn now to the next page.

Among the non-British countries, China was in 1946 our fourth, and in 1947 our sixth, best customer. Yet today's China, with

political unification, internal peace and economic expansion, is capable of far greater trade than the war-torn China of the 1940's.

Indeed, Britain which recognized the new Chinese government soon after it was formed, has increased the volume of its trade as compared with the years of Nationalist rule. United Nations statistics show that in 1953, China imported large quantities of manufactured goods from the United Kingdom, West Germany and France, and nothing whatever from Canada. The range of manufactures imported is quite broad and includes many that Canada could supply.

Just to add a few words in line with this, we believe that Canada as one member of the great commonwealth of nations should immediately recognize the government of China. Here we have an example of following the lead of Britain --

THE CHAIRMAN: You realize that is hardly within our terms of reference.

MR. JENKINS: O.K.; I will see if my next sentence is. If our policy, shall we say, is tied so closely with that of the United States that if the United States is not going to deal with China, neither will we, that is exactly the policy we are following and we feel that one of these days the United States is just going to go out and recognize China and move into that market, and leave Canada sitting

here like a sitting duck. You will excuse my shipyard expressions, I hope.

THE CHAIRMAN: We have not heard any yet.

MR. JENKINS: As we have indicated, however, the problem is not confined to finding markets for manufacturers. We also have the growing problem of disposal of our wheat surplus. This problem, which is particularly acute this year, is an ridiculous anomaly in a world with hundreds of millions of hungry people. The densely populated nations of the Orient, such as Japan and India have bought our wheat in the past, and we are certain they would buy a great deal more, if terms could be arranged which would facilitate a reciprocal movement of their exports to Canadian markets.

I am going to leave the bulk of that to be dealt with by Mr. Guest, but I would like to say, not being an economist and not professing to be one, there is one thing that has always caused me much concern. If my neighbour across the street needs something to eat, I never ask him if he has any money. I will send for a loaf of bread. Yet on the international scale we find our granaries bursting with grain; my father-in-law has 2,000 bushels of grain lying out in a pile because there is no place to store it, and we have millions of people in Asia crying for a

handful of grain.

We believe there is something wrong with our thinking when this is allowed to happen. It happened to a lesser extent in 1930, when the storage in New Brunswick was jammed full of potatoes and the people on the prairies had their granaries full of wheat. We could not get the potatoes and they could not get the wheat. Somewhere along the line somebody found an answer to that, and surely in the next 25 years we will find an answer to this question of starving people while we are basking in a land of plenty.

Now we come to our recommendations. We have endeavoured in this brief to present to you the main issues affecting the future of our economy as viewed from the position of the west coast maritime workers.

We do not pretend to know the answers to all of these problems, but we would suggest to you the policies that appear to us to be necessary.

First, we would stress the need for a more active and more flexible policy on foreign trade. Large potential markets exist for our products, but they will not be realized if the approach continues to be on a hard currency cash and carry basis. We believe that the Canadian government should play an active role in promoting our exports and should be prepared to negotiate

bilateral trade agreements and to accept foreign currencies for some part of our exports.

We believe that the Canadian government should immediately recognize the government of China, not merely as a political gesture but as a first step toward opening up trade. Coupled with this should be government-sponsored trade missions to China and to the other nations of the east.

We would recommend that as a means of encouraging the vigorous development of Canadian secondary industry, the Companies Act should be amended to provide that all companies must have a majority of their stock owned by Canadians. This is not intended to bar foreign capital from participating in the development of our country, but to try to ensure that they will be investing as partners in the development of Canada and not as absentee owners exploiting our resources for foreign benefit.

We believe that the development of secondary industry in our province would be accelerated if a custom smelter were built on the Pacific coast. While this will undoubtedly materialize eventually through private initiative, we believe that it could be done now, and profitably, if the government would take the initiative.

Finally, we suggest that Canada, as a great trading nation, must have a merchant

marine. We believe that this would be entirely feasible if the Canadian government would adopt the same kind of measures that have been used by other nations such as Great Britain, the United States, Japan, Norway and others, in order to equalize international competitive conditions.

If our opportunities are intelligently grasped, and sound policies pursued, we have every confidence in the future of Canada as one of the great nations of the world.

Now, Mr. Chairman, that just about completes my presentation. I would like to say in passing that as a Canadian I believe we have the greatest inheritance in the world, and I believe it is up to the young people of our country to get the vision and foresight of this great country and take part in just such commissions as we are taking part in today, that we might look ahead and plan for the future, because I truly believe that Canada in a few years will be one of the greatest nations in the world.

THE CHAIRMAN: Thank you, Mr. Jenkins.

MR. GUEST: Mr. Chairman and gentlemen, I am going to make a very few brief remarks.

THE CHAIRMAN: You are Mr. Guest?

MR. GUEST: Yes, of the grain workers' union. I am sure almost any remarks

I might make would be an anticlimax, considering the fact that you have just finished sitting on the prairies; but in our brief we underline the importance of a flexible trading policy as far as Canada is concerned. This is very aptly illustrated in our present grain marketing situation. The government position has been, and as far as I know still is, that we believe a cash and carry policy in so far as grain marketing is concerned, is the best policy.

There have been certain modifications since Mr. Howe spoke at some length in the House of Commons last spring on grain marketing, but by and large that is the policy. The Canadian wheat board, which handles the bulk of our grain shipments, cannot enter into any deals other than deals which are paid for in cash, dollars or other negotiable currency.

We believe this is holding back the export of Canadian grains, particularly Canadian wheat. We know that the Canadian wheat board cannot enter into a barter arrangement, or even a barter and cash arrangement; yet it is precisely these sort of deals, if you call them that, that can be negotiated at the present time and which would result in the sale of Canadian wheat and other grains. We are paying a tremendous amount in storage charges on hundreds of millions of bushels of Canadian grain; and if

we continue to have good crops, at the present rate of export we will have an impossible storage situation in Canada. It is not only an immediate problem; it is a problem which is going to be a running sore in our economy over the next period of years, and a problem to which I am sure the commission is going to give a good deal of thought.

If we can afford to pay approximately one cent a month per bushel of grain for storage in Canada, then I think we could afford to endeavour to move the grain out of Canada, even if we have to pay a portion of that one cent a month in interest charges in financing credits or in financing barter deals.

I would like to just describe a particular deal in point. Two weeks ago China's government came into the market for Canadian grain, for the first time in many years, when they requested bids on 30,000 tons of wheat. In exchange they offered 5,000 tons of shelled peanuts. The value of the wheat would be \$1,750,000, and of the peanuts \$1 million. The 5,000 tons of peanuts represent about one-sixth of our total annual consumption, which is a considerable percentage; but the balance of three-quarters of a million dollars would be cleared in cash, most likely in negotiable sterling.

The Canadian wheat board is totally unable to handle that deal. The deal is being negotiated at the present time by, of course, the private grain trade; but the government itself is in the position that it can only offer assistance in a very indirect manner through our government grain selling agencies.

Particularly in our relationships with the Orient, with China, India, Pakistan and Japan, which are either good customers now or potential customers, in dealing with these countries at the present time, until there is a much greater diversification of trade between those countries and the rest of the world, I am sure barter is going to play an important role. Therefore the government must definitely get into the business, through the negotiation of trade agreements and setting up the necessary financial guarantees for the private grain trade to handle such deals. It has been stressed by Mr. Jenkins that the huge population of China is a tremendous potential market for surplus foodstuffs and other commodities from Canada; and as far as the Pacific coast is concerned the movement of grain, 95 per cent of which comes through the port of Vancouver, is of great importance, particularly to us who are working in the industry. In view of competition from the St. Lawrence seaway, which

is estimated to cut the price of grain by 5 cents a bushel in freight, alternative markets which are non-competitive from our point of view, apart from the prairie regions, are solely in the far east. Therefore I think when we refer to a more flexible marketing policy we want to stress the importance of the government making this possible. They have been most reluctant to do it up to the present, but they must make it possible for private traders and government agencies such as the Canadian wheat board to enter into barter or barter-cash arrangements.

As far as the future of Canadian grain sales in the Orient is concerned, we have increased our sales to Japan along with India from an average of 18 million bushels in the five years preceding the war to 88 million bushels in 1953-54. That is to say, their imports of wheat and wheat flour have increased and our sales have increased proportionately. Because of the changes in the relationship between basic foodstuffs in the Orient, such as rice and the other grains, we are developing a permanent market; but we can develop a much greater market providing we begin trading with China, and this is where future development from the point of view of the Pacific coast and our national economy is of the greatest importance.

THE CHAIRMAN: Thank you very

much, Mr. Guest.

MR. GUSHUE: You made reference to the manner in which all other maritime countries support their shipbuilding industries. Are you able to supply details?

MR. JENKINS: I believe our economist has some material on that here. We only have one copy of it. We would be glad to file it with the commission a little later on, if that would be all right.

THE CHAIRMAN: Yes, that would be fine. Thank you very much, gentlemen.

THE CHAIRMAN: Now, are Mr. Woodward and Mr. Skinner here?

MR. WOODWARD: Mr. Chairman and members of the commission. We do not have too much of an axe to grind today, but we have been asked our views on the desirability or otherwise of maintaining and encouraging Canadian production and supply of the principal categories of goods which our companies handle, which is pretty well all consumer merchandise.

As a company, and I think I can speak for the industry, we have always given first consideration to our local manufacturing industries, as we believe if we can make them self supporting and profitable we will encourage a local industry which in turn will spend money in our stores. After that the Canadian suppliers definitely get our first preference, providing that price, style and other factors that go to make up the merchandise are competitive.

One thing we feel quite strongly on is that we do not think the Canadian consumer goods manufacturers should be given any increase in tariffs, or any high protective tariffs. We found that during the time when we were on a quota in regard to American money, quite a few manufacturers just upped their prices because we could not go down to the United States, which is our largest import market. We could not go down there and they knew they had us by

the short hairs. We believe we are a basic industry country, and we pretty well have to live by exporting what we can export best. If we support one industry, that leads us to supporting practically every industry in the country, and after all the people who pay the shot on that are the public. This money has to come from somewhere, and in the long run if the public pays more, that is where the money comes from.

The other point in connection with this high tariff proposition is that when we get keen competition from outside countries, we believe we have manufacturers who are second to none, and in most cases we find they can rise above competition and make something a little better. If they cannot; if they have to be protected by tariffs, as far as we can see they should not be in the business at all, because our public demands style right merchandise, the latest of everything, and we should have manufacturers smart enough to give the public what it wants. The only way we can do that is through competition. We cannot do it if somebody is protected because they do not work harder than they have to.

The other point is that as far as we are concerned there is no monopoly on style and ideas, and we get a great many ideas in connection with styles from foreign countries. I would say that as a company we import merchandise

from almost every country in the world, providing we can sell it. In connection with many things we bring them here and have them copied, because we can have it done cheaper. We find a good many manufacturers go to the United States or to England or to Europe and bring back merchandise and copy it here for less than the cost at which it can be brought in.

We feel that if we stop importing, of course the other countries will stop buying our exports. After all, it works both ways. If we raise our tariffs, they will raise their tariffs on something that will hurt us perhaps a lot more.

One of the strong arguments we have found against an increase in tariffs as far as we are concerned is that every year -- I think probably practically everybody in Canada is guilty of this -- hundreds of millions of dollars worth of goods are brought in from the United States by Canadian tourists who go down there. They are allowed to bring in so much, duty free, and I would say they probably double that by wearing the rest of the things across the line. They buy a new pair of shoes and scuff them up a bit; or they wear lingerie back across, and it is hard to detect. You may be guilty of that yourselves. We have no actual figures on this, but I would say it runs into

the hundreds of millions of dollars.

As a retailer we have to compete against that. The manufacturers also have to compete against it; but when you have high tariffs the more of that is going to be done, of course. It is something people do not hear too much about, but it hurts the retailers, the more so the closer you are to the border, because it is very easy to go away over the week end. You have a nice holiday, and do all your shopping. We know many people who go down to the United States and bring in stuff duty free.

MR. GUSHUE: Do the United States tourists do the same thing to the same extent?

MR. WOODWARD: I would say their trade has dropped off considerably. We have no exact figures because we do not know exactly what they pay in Canadian currency, but as far as we are concerned we have much better tourist trade with people from the prairies back east who come out here to visit.

United States tourists spend very little indeed compared with what they once spent. This was a good place for English china, woolens and so on. At one time it was something to say you bought something away from home; but in the United States you can buy china at almost the same price that is charged here, and cashmere and woolen sweaters almost as cheaply. Since the war the Americans themselves have gone out

and are importing a great deal more than they did previously. At one time they seemed to be frightened of anything from a foreign country. It was too much for them; they marked up the price a great deal, and people could buy the goods in Canada for less money. Now prices are almost the same in the two countries, and when it comes down to basic textiles or anything like that the goods are cheaper there than in Canada.

There is another thing that is rather noticeable. This is probably true in a minority of consumer manufacturers, but in many cases they have set their prices at what goods can be imported for. In other words if the tariff went up 10 per cent on a certain commodity, within 6 months the Canadian price of that commodity would be up 10 per cent. Sometimes they like to stay about one per cent below what it can be imported for, and they almost use that as their cost factor in selling the product on the Canadian market.

One other question I was asked was in connection with the decentralization of the industry manufacturing consumer goods. I do not purport to be any expert on industry, but our own feeling, I think, is that industry decentralizes on its own initiative, depending on where the population is. After all, with a little more than a million people in British Columbia we are not going to have the same consumer industries they have in eastern Canada, where the population

is much bigger. Also I would imagine that such things as power, labour force and everything like that comes into the picture, because in many cases it is much cheaper to export the raw material since the duty on raw material is much less than on manufactured goods.

Mr. Chairman, that is about all I have to say unless there are questions anybody would like to ask. Mr. Skinner has some figures, I believe.

THE CHAIRMAN: Thank you, Mr. Woodward.

MR. SKINNER: Mr. Chairman, there was an inquiry in connection with the distribution costs in Canada and the United States. I have prepared some figures, which I think are quite understable.

THE CHAIRMAN: Thank you very much.

MR. SKINNER: In considering this matter of distribution costs of course the question which has come to mind is just what are distribution costs. Probably that would come to your mind as well, considering your profession.

We took the attitude that as far as distrubtion cost was concerned, to us it was everything except the cost of the merchandise. The question was asked in two parts; whether there was any prospect of an increase in cost in Canada, and also how our costs compared with United States costs. Further, the question was asked as to

the possible change in fixed costs as against variable costs.

Dealing with the latter point, I would say that fixed costs to us are also based upon wage and salary structures. If our taxes go up, we know that the prime reason for the increase in taxes is increases in civic salaries and wages. Basically it comes down to the variable of salary and wage costs, which we feel are going up and will continue to go up.

As far as costs as between Canada and the United States are concerned, as you probably know the United States department stores are very generous in the dissemination of information as to their operating results. In Canada the situation is exactly the reverse. We did, however, find some figures that were prepared by the Canadian Retail Federation, and I have a copy of their summary as well as the Harvard bureau figures, if you would like them.

THE CHAIRMAN: I think we would like them very much. Will you explain this table?

MR. SKINNER: Yes, sir. These figures are based upon sales in the departments that are operated by the store itself, and the figures are for the calendar years 1946 to 1954. We have the figures for all the years, but I chose those as representative figures.

THE CHAIRMAN: These are for the United States?

MR. SKINNER: These are the the United States figures at the top. You can see from those figures that there has been an increase from 28 per cent of sales for total expenses in 1946 to 33-3/4 per cent in 1954.

THE CHAIRMAN: That is exclusive of profit and income tax?

MR. SKINNER: Yes; those are actual expenses before taxes and profit. As far as Canadian figures are concerned, the only ones available are for 1952 and 1953. The 1954 figures have not as yet come to us. For 1952 the Canadian figure was 30 $\frac{1}{4}$ per cent, and for 1953 it was almost 30 $\frac{1}{2}$ per cent. So it is evident that as far as Canada is concerned, our figures are running approximately 3 per cent below the comparable United States figures.

I would add for your notes that I could not quite understand the difference between the all-over expense figures as shown. The United States figures are given in the two right hand columns in that lower group, and are considerably higher than the Canadian figures. But it is evident that there is a similar discrepancy in the real estate costs, and as far as I can ascertain from the data available the difference is maintenance, which is carried in the real estate figures in Canada and is carried in the other column in the United States figures.

THE CHAIRMAN: The point that would seem to be emphasized -- I would like to see if you agree with this conclusion -- is that presumably retailers do not expect to operate without some profit, even though it may be a modest one; and if you include that profit with provision for federal income taxes, the part of the consumer's sales dollar that goes to defray the cost of distribution is very high indeed, and it looks as if it were getting higher.

MR. SKINNER: That is right.

THE CHAIRMAN: If in addition to the costs of the retailer you included the advertising and selling costs of the manufacturers as well, it would come to an even higher percentage of the total sales dollar. Is it fair to conclude that costs of distribution are rising faster than the costs of manufacturing?

MR. SKINNER: I am afraid I could not answer that question. As far as the costs of distribution are concerned, there was some considerable concern expressed at the meeting of the National Retail Dry Goods Association of the United States here about two years ago in connection with costs, which were rising. There was an anxiety, as a matter of fact, on their behalf in connection with those rising costs as shown by the department store figures across the United States. Luckily they have managed to halt it in recent years; it has

leveled off again.

The same situation has been true in Canada. My personal opinion, for what it is worth, is that the Canadian costs of distribution have been increasing more rapidly than those in the United States for say the last 12 years, and I would say that is particularly true because of increasing salary and wage costs. In other words I believe the Canadian levels are getting closer to parity with the United States rates than they were before.

THE CHAIRMAN: To come back to my question, if the percentage of the sales dollar which is represented by the costs of the retail operation in the United States has gone up from 28.1 per cent to 33.75 per cent, quite obviously the percentage of the sales dollar that is available for profit to the retailer and the portion that is available -- and this would be most of it -- to the manufacturer is being reduced. So am I wrong in thinking that in the United States at least over these periods the percentage costs of distribution have been rising faster than the costs of manufacturing?

MR. SKINNER: I am afraid I could not answer that.

MR. WOODWARD: I would say quite definitely they have, because in manufacturing you can put in automatic equipment much easier than in a store. After all, you have the contact

between the clerk and the customer, and you cannot get a machine to take that job. In food stores of course quite a lot of automatic machinery has come in to speed up the operation.

MR. SKINNER: I would certainly think the manufacturer's margin has been reduced since the war. There has been a great deal of competition, with that result.

THE CHAIRMAN: Thank you very much. Mr. Woodward, there were two questions I would like to ask you. I think at the beginning of your remarks you said you did as much as you could to buy from local manufacturers, and that this was a natural thing for you to do. The question I would like to ask is this. Is a secondary manufacturing industry developing in British Columbia of substantial proportions; and if the answer is yes, do you think that trend will continue?

MR. WOODWARD: I would say that since the end of the war until the present time it has probably increased about 300 or 400 per cent, but it is still not a large market. I would say it is not more than maybe two or three per cent of our total buying.

THE CHAIRMAN: Two or three per cent?

MR. WOODWARD: Yes. Before that it was probably in the neighbourhood of one half of one per cent. The large markets are Winnipeg, Montreal and Toronto, as far as we are concerned.

THE CHAIRMAN: As the population of this province increases I suppose it is reasonable to assume that manufacturing operations will increase here also?

MR. WOODWARD: That is right. There are a few up and coming manufacturers around here who do a large Canadian business, and who are shipping back east. Somebody from British Columbia should be able to compete with somebody from eastern Canada, since they both have to ship some distance.

THE CHAIRMAN: That is a point of view we have been hearing something about.

MR. WOODWARD: There are manufacturers here who are far more competitive here than eastern manufacturers, especially in work clothing.

MR. GRAUER: That figure you gave was a figure applicable to the secondary manufacture of consumer goods?

MR. WOODWARD: That is right.

MR. GRAUER: Not for producer goods?

MR. WOODWARD: No.

THE CHAIRMAN: Your remark about work clothing, I suppose, applies also to Edmonton, where they have a very large operation?

MR. WOODWARD: That is right. Winnipeg is one of the biggest producers in Canada.

THE CHAIRMAN: We have heard from

a number of people the opinion that it is desirable to do everything we can in this country to encourage increased importations from the United Kingdom. As far as consumer goods are concerned, do you fill a substantial percentage of your requirements from the United Kingdom, or is it mostly from Canadian and American sources?

MR. WOODWARD: We buy a lot from the United Kingdom; we always have. Talking about buying goods from the United Kingdom, I believe that not only ourselves but everybody would buy far more goods from the United Kingdom if the manufacturers would live up to the letter of the orders you give them. But in many cases we are in a highly competitive market, and if we buy toys for Christmas time we have to have them in before Christmas. They are no good in January, because we take a 100 per cent mark down. English manufacturers have been very poor as far as deliveries are concerned.

THE CHAIRMAN: Are they still as bad as they were?

MR. WOODWARD: They are not much better. They are perhaps a little better.

THE CHAIRMAN: Everybody knows that after the war they were up against difficulties.

MR. WOODWARD: That is right. Delivery on china was three years. Now it is down to 18 months, or sometimes nine months.

England was always the No. 1 china market, but others are starting to come in. You can go to Germany or Japan and they will give you three months delivery; not that we buy too much from there, because it is not as good.

We are in the trade with dollars, and we like to turn them over. The English yet have to get their deliveries in line with what we can get in Canada or the United States. In many cases there is a good deal of talk about them giving preference to the dollar countries, but that is not right at all; I think they give preference to the easiest market. If they can sell everything they can make in Australia and South Africa, as they can, they are not going to make something for the Canadian taste, which after all is bound up with the United States taste whether we like it or not.

THE CHAIRMAN: Is it a question of deliveries, or is it a question primarily of putting out different lines in order to meet the taste requirements of the Canadian public?

MR. WOODWARD: I would say it was both. You talk to an English manufacturer and he will say, "Well, I can sell all I make in Australia and South Africa, and if they like it why shouldn't you?"

That is not the point. If our customers do not like it, we cannot sell it. In the textile industry, for instance, a lot of

synthetic fibres are coming in and replacing the English knitwear. After the war I think the English knitwear was sold in 70 per cent of the stores in this country, but now that percentage is getting much smaller because of the nylons, orlons and dacrons which are coming in, and which in many cases are made and knitted in Canada.

MR. GRAUER: There is a big enough market there to make it worthwhile for them to tool up to meet our preferences?

MR. WOODWARD: Definitely. There are large factories here which do nothing but sell to the Canadian market and find it worthwhile. A good example of that is the English bicycle industry. We have one here which is almost out of the picture now; that would be the Canadian Cycle Company. But the English market is tooled up for making bicycles, and it is serving the Canadian market. Practically all the bicycles sold in Canada are made in England; I would say at least 95 per cent of them come from there.

THE CHAIRMAN: When you say Canadian Cycle, that is C.C.M.?

MR. WOODWARD: That is right. What the British can sell in Canada, as a rule, may be just adjunct to what they can sell in the United States. In other words, they have a population of 160 million; it is a very nice

market to work in, and if they can sell there the Canadian people will buy the same goods sold in the United States. After all, our public is subject to all the advertising and so on.

THE CHAIRMAN: On that point, it has always seemed to me that the British manufacturers do spend so much time trying to crack the United States market, which is much harder than this one, that to some extent they have overlooked the possibilities here.

MR. WOODWARD: That is right. There is a big market for them. I think anybody in the retail trade would give preference to English merchandise over United States, whether through family ties or through commonwealth ties. It is only natural, but they have to live up to their orders; they have to give quick delivery, and produce for the Canadian market.

THE CHAIRMAN: Mr. Grauer suggests that we mark this table of figures as Exhibit 93. Thank you very much, Mr. Woodward; we are very grateful to you and to you, Mr. Skinner, for the help you have given us.

---Recess.

---After recess.

THE CHAIRMAN: Shall we come to order, gentlemen? We now have Mr. Harrison, vice chairman of the Fisheries Association of British Columbia, who will present a brief on behalf of his association which we will mark as Exhibit 94.

MR. HARRISON: Mr. Chairman and commissioners, it is my privilege to formally present this submission to your royal commission on Canada's economic prospects, which is submitted on behalf of the 13 companies who are members of the Fisheries Association of British Columbia.

Since dispatching this brief in its printed form in the number of requested copies, which we did rather hurriedly, we found that there were some errors. We have therefore inserted an errata page under the flyleaf, and we would request that these corrections be made. I am sure it would not be the wish of the commission for us to read this brief this afternoon.

THE CHAIRMAN: You were good enough to let us have it in advance.

MR. HARRISON: Perhaps, though, I should go down through the summary, which is quite short, which would serve to review the points we raise in the brief.

The commercial fishery of British Columbia is a public heritage, that is a renewable food resource, capable of development, and which provides employment and food for the people of Canada. The careful cultivation, maintenance and development of this fishery will have a beneficial effect on the economic future of British Columbia.

In reviewing the industry's growth and in forecasting its future, we have been guided by three basic principles:

(a) That this public heritage must be protected, conserved and developed rather than destroyed through facilitating the growth of other industries.

(b) That the primary responsibility of regulation, conservation and development rests with the governments of British Columbia and Canada.

(c) Because production far exceeds domestic consumption, the industry requires a framework of world trade permitting the continued development of our export markets.

Commercial fishing is the fourth largest primary industry of the province, preceded only by forestry, agriculture and mining. The industry provides employment directly for some 18,000 persons and it is estimated another 75,000 persons are indirectly dependent upon the industry for employment. In the marketing of its products

the British Columbia fisheries enjoys a strong domestic demand as well as an extensive export market.

In 1954, the commercial fisheries of British Columbia had a market value of approximately \$69,000,000. Of this total, salmon accounted for \$50,000,000, herring \$7,000,000, halibut \$6,000,000 and the other species, such as bottom fish and shell fish, the remaining \$6,000.00.

The tidal fisheries of the province are administered by the federal government, and in the case of the salmon such administration extends into the non-tidal portions of the rivers where necessary. Generally, the fisheries of non-tidal waters and all processing of fish within the province are regulated by the provincial authorities. Of vital importance to the major fishery, salmon, is the fact that the provincial government has control over the utilization of all water resources in the province, with the exception of international rivers. It may be said that while the authority over the fishery is divided, the responsibility for its maintenance and growth is not.

Our brief deals primarily with the major fisheries, salmon, herring, halibut, and to a lesser degree, groundfish and shellfish. Projections have been made for each of the major fisheries based on the principle that through

suggested conservation measures their volume can be materially increased.

Salmon fishing. The salmon fishery of British Columbia can be at least doubled within the next 25 years. To arrive at this projection of raw material, we have analysed the natural productive capacities of the salmon rivers and waterways and reviewed the known conservation practices and new knowledge of the biologists and the scientists in this field. It is government and industry's responsibility to capitalize promptly and adequately on this new knowledge.

The doubling of production would bring the total salmon landings to approximately 300,000,000 pounds per year. At today's market values this means an annual increase of over \$40,000,000 to the industry.

We give as examples of the basis for our projection at least two outstanding developments; one dealing with the rehabilitation of sockeye salmon and the other with the rehabilitation of pink salmon.

The work of the international pacific salmon commission on the Fraser river has already rehabilitated the river so that now the production of sockeye salmon is greatly increased over the output of the last three decades. However, as the commission stated in its last annual report, present production is still

only 56 per cent of the average of the peak years, 1910-1913. There is no reason, assuming that the waterways will be kept clear, why this greatest of all salmon rivers cannot again have a production equivalent to its former peaks. It may well be that new scientific knowledge yet to be acquired will boost this production well beyond what nature was able to do unassisted.

The federal Department of Fisheries is currently conducting an experiment at Jones creek, a small tributary of the lower reaches of the Fraser river, which has promise of production possibilities far beyond those of our projections. At this location an artificial bed for the natural reproduction of pink salmon has been built. It is confidently expected that the result of this venture will set the stage for similar developments throughout the entire coastline. A second feature of this experiment involves the transplantation of eggs from other areas in order to provide a run in off years. Many of the pink streams in British Columbia produced in volume only every second year and, if this portion of the experiment proves successful, the output and hence the return, could well be many times our present production.

Because of a similarity of habits between the spring, coho and sockeye salmon, work done for the sockeye will advantageously affect the production of springs and cohoes. Work done

for pink salmon will effectively increase the production of chum salmon.

Salmon is marketed primarily in the canned state with the balance being sold in the fresh or frozen form. The average pack of canned salmon is 1,500,000 cases of which the domestic market absorbs approximately 50 or 60 per cent; the balance goes to the export markets of the world, principally the United Kingdom, the Netherlands, France, Italy, and the commonwealth countries.

In projecting a pack of 3,000,000 cases it might appear that we are creating marketing problems. However, assuming normal world trade and the success of Canada in maintaining the flow of goods to all markets, we do not think this increased pack will present any insurmountable marketing problems. By 1980, it is estimated that the Canadian population will have risen to 25 million and assuming only the present rate of consumption, this market should absorb at least 1,500,000 cases.

Due to currency difficulties, the United Kingdom has annually been purchasing about 200,000 cases whereas it has been estimated that she alone can consume close to 3,000,000 cases per year. It is therefore reasonable to assume that 1,500,000 cases, approximately 700,000 cases more than we presently export, can be absorbed in markets where the desire for canned salmon has been

created over a long period of time.

Fresh salmon has and will continue to find ready acceptance on local markets and those of eastern Canada and United States which are accessible as a result of good transportation. Frozen salmon will continue to be a large and important segment of the industry, although technological developments may alter the methods of processing and to some extent marketing. A recent example is the change from bulk sales to small, quick-frozen packages resulting from a changing consumer demand. The principal market for frozen salmon will probably be, in the future as it is today, the United States.

The herring fishery. The average British Columbia herring production has in recent years been in the neighbourhood of 175,000 tons annually with a market value of \$7,000,000. It is our opinion that by 1980 this production will have increased by some 75,000 tons thereby adding \$3,000,000 to the value of this fishery. This 40 per cent increase will result from a greater knowledge both as to the herring population and the extent to which this population can be fished.

The bulk -- 97 per cent -- of the herring catch today is marketed in the form of meal and oil. There have been, at times, reasonably substantial markets for salt herring in the Orient; and during world war II there was a very large production of canned herring to fill

the need for a low-cost, high-grade animal protein food. These markets, unfortunately, no longer exist in any quantity.

Meal and oil are sold in the North American market; oil for the production of soap, margarine and cooking oils, and meal as a supplement for cattle, poultry and other animal feeds. Some goes off shore.

We fully recognize that the method of processing herring could change radically over the period under discussion. Accordingly, if the end use of herring becomes a direct food for human consumption, the value would be multiplied and new export markets opened to the industry.

The halibut fishery. The halibut fishery has been under the control of the international halibut commission for a number of years. The efforts of the biologists, scientists and others engaged in conservation work, has resulted in the rehabilitation of this fishery, to the extent that 60,000,000 pounds of halibut are caught annually by American and Canadian fishermen. The British Columbia share amounts to 22,000,000 pounds having a market value of \$6,000,000.

While any increase in halibut production will undoubtedly have its annual variations, we believe that by 1980 the total catch will be close to 80,000,000 pounds a year. As both American and Canadian fishermen participate

in this fishery it is difficult to project the probable increased value that will be derived by British Columbia, but it would be reasonable to assume an increase in the neighbourhood of \$3,500,000.

The main market for halibut is in the United States, with a smaller portion remaining in Canada. The marketing of halibut will undoubtedly follow that of other fish with the emphasis on the small frozen packaged form.

Sundry fisheries. The total market value of all the species comprising this group is approximately \$6,000,000. Some, such as pilchards, tuna and grayfish, were historically valuable while others, groundfish and shell fish, have a potential for the future.

It is our opinion that due to changes in oceanographic conditions, those species which have disappeared -- pilchards and tuna -- will return some day to our coast. Also, grayfish and turbot should be fished in the interest of conservation; while other species -- groundfish and shell fish -- are capable of considerable expansion providing market conditions are suitable.

Employment. We have based our estimate of a doubling of the supply of commercial fish on sound, effective and progressive research and management. How will this increased production affect employment in the industry 25 years from now?

Looking toward the future, even if present fishing methods are employed, there is no doubt that with improvements and more effective utilization of fishing equipment, the forecasted quantities of fish could be caught without increasing the amount of gear in the water. To predict that fishing methods could be completely revolutionised is not unreasonable, but far more than technological progress is involved in consideration of this subject.

Essentially the problem as to the most efficient way to harvest fish is of a social nature. The number of fishermen will increase if the livelihood derived from fish is equal to, or better than, that from other sources of employment or is more attractive to the self-employed than other lines of endeavour. Conversely, if the returns from fishing do not permit the fisherman to earn a satisfactory livelihood in relation to that obtainable elsewhere, the numbers will tend to decline. It has been within this economic framework that the industry has functioned. From time to time proposals have been made to the federal Department of Fisheries by the organized fishermen to limit the number of fishermen participating in a particular fishery. Such proposals would have run counter to the freedom of the individual inherent in our law, when associated with the harvesting of a raw product whose ownership is vested in the

people of the province.

It is interesting to note that the trend has been toward fewer and larger plants and automation. In conjunction with this trend, increasing numbers of skilled plant employees are now being retained for longer periods of the year. A continuation of this trend can be anticipated and the increased production capacity necessary to handle the projected volume of catch can be achieved with a relatively small increase in the number of unskilled employees.

This, however, is assuming no major changes in the processing methods. We have had instances in the recent past where the consumer demand for a specific type of packaging has added materially to the number of employees involved. Therefore we do not feel that we can forecase with any degree of accuracy the results of these combined factors.

It is evident that the projected increased production will favourably affect the employment in related industries. Although our industry is highly seasonal, secondary industries do benefit as they are able to spread their production throughout the year when providing for the fishing industry.

Sundry factors.

(a) As a result of being largely dependent upon export markets, the industry is affected by the tariff structure of other countries.

Because the basic livelihood of Canadians is related to the primary industries, the export markets for their products must be kept open. We commend the government for the recognition of this principle and their efforts in this direction. The United Kingdom and other commonwealth countries have been traditional markets for our canned products and it would be extremely serious if these markets were closed to the industry. Government efforts through GATT, and encouragement of trade with the United Kingdom and other members of the commonwealth are most important to our industry. We hope that the commission will recommend the continuation and extension of the approach now adopted by the federal government.

(b) The need for an embargo on the export of fresh salmon to the United States is the result of two conditions; a higher market price for canned salmon in the United States than in Canada, and a tariff differential favoring the export of salmon fresh rather than canned. At the present time the duty is 1/2 cent per pound on fresh and 15 per cent ad valorem on canned salmon. By way of example, on a pink salmon that would be 35 cents and on the raw fish about \$2.50, if you took it on a case basis.

Under these conditions, without an embargo, a very large proportion of British Columbia salmon would be exported fresh for

canning in the United States. This would result in an economic loss to British Columbia wage earners, processors and supply houses.

Since 1947 the government has permitted the export of certain species for portions of each year. At the present time, it is permitted to export fresh chum salmon at any time, while fresh coho salmon may not be exported after September 1st.

Because there is no embargo on chums, large quantities of the raw fish go to the Puget Sound canneries. This is a situation that should be watched as it requires a degree of flexibility in the interests of all concerned in the British Columbia industry.

(c) Freight rates affect the industry in the distribution of its products throughout the continent. We recognize the geographical disadvantage of producing at great distances from the heavy centres of population and we are prepared to accept this handicap. We do, however, protest when other areas, who should normally operate with the same geographical handicap, are given privileges not extended to British Columbia. This basic principle should we feel, be endorsed by the commission.

(d) We have not endeavoured to estimate the capital requirements of our industry 25 years from now. We have assumed that the commission's interest in this subject is

primarily with the capital necessary to engage in vast new ventures in the development of this province and in Canada. The fishing industry with changes in methods and technology will continue to provide capital in order to make the enterprise as efficient as possible. The fishermen will undoubtedly do likewise in the improvement and maintenance of their equipment. The government, as custodian of this public heritage, should provide the capital expenditure necessary to ensure the projected increase in raw material.

Utilization of water. Water is vital to the survival of fish. The fresh water in our rivers and lakes that provide the spawning and nursery grounds for salmon is also desired by those advocating its use as a source of hydro power.

We recognize the wish of the people to have power available for development of industry and for convenience in the home. We do believe, however, that it will always be the desire of the people to have power development without the destruction of their great heritage, the salmon fishery. In addition to non-fish producing streams, there are many other sources of energy such as coal and natural gas now available in the province, and others are mooted for the future.

Our projections on fishery

production are made for the year 1980. What energy sources will be available by then is not within our ability to forecast. We believe the commission will concur that it would be an insult to humanity to destroy a perpetuating food resource for some short-term advantage that may exist by the production of power from fish-producing rivers. In this respect, a great responsibility rests upon the legislators, administrators and scientists of both the federal and provincial governments to ensure that both fish and power are available to the people of Canada.

As we have outlined, the governments' responsibilities with respect to the fisheries of this province are very great indeed and go far beyond the commonly accepted term of conservation. Their responsibility is to see that what nature provided for the people is not only protected but that every available scientific advancement be applied to achieve the growth and expansion of this important portion of our economy.

Reviewing the efforts of the years gone by, criticism could be laid at the doorstep of government for some of the adversities suffered by the fishery; criticism could also be placed upon the industry that exploited this fishery.

In recent years legislators,

administrators and scientists have done a commendable job. They have now reached a stage in their knowledge and control of the fishery which leads us to believe that the future is very bright. The realization of our projection will require the application by responsible governments, of the knowledge which now exists in order that no time be lost in providing the economy with the increased values that appear to be within our grasp. In addition to this application of knowledge, it will require money to do the job and the staff to carry it through.

Industry will continue to assume its responsibilities but in the fisheries of British Columbia the control of the development is entirely in the hands of the government authorities. For this reason we urge the government to act quickly and adequately, feeling certain that if they do, our projection of increased production can be reached possibly before the 25 year period under consideration. We know there will be reversals. We know that a pessimistic approach could be taken; but we believe that there is no basis for such an attitude at this time. Money invested today can produce substantial returns and thus add materially to the economy of this province and the nation.

To forecast the British Columbia production of the marine resources from the north Pacific ocean is indeed a very difficult task. Many prominent authorities believe that before very long the protein requirements of the world will be largely furnished from the sea. Certainly the knowledge of marine resources is increasing rapidly and in comparison to the scientific development of the land is a recent study.

Perhaps the importance of this food resource has been overlooked to some extent by the people of our country who are rich in other natural resources, and never short of food.

Looking at the population of the world, it may be that the production of food, particularly animal protein food, will assume a new importance -- one that cannot be measured in dollars because it will be measured in human life.

THE CHAIRMAN: Thank you, Mr. Harrison. I think Dr. Gushue will have some questions.

MR. GUSHUE: I am sure I have no questions that Mr. Harrison cannot answer very easily. I was wondering if you could deal briefly with the whaling fishery, which has not been mentioned in the report. I know the reason, of course, but could you give a

general outline of that industry in British Columbia?

MR. HARRISON: Yes, sir. The reason the whaling industry is not mentioned in this report is that there is only one company, British Columbia Packers, who are engaged in whaling, and this brief was written on behalf of the association.

The whaling industry in British Columbia has existed for a number of years, but its life has terminated on more than one occasion. Away back in 1918 to 1925 there was a fishery, or at least a whaling operating, but it went kaput. British Columbia Packers have been in it for about five years, operating off the west coast of Vancouver island.

The number of whales taken started off in the neighbourhood of 200, and is now a little over 600 whales per year. We are allowed to whale, by the international commission, for six months out of any 12 month period, and we do whale five or six months in each year.

The taking of whales is spread over the various species, as you know; the sperm, fin back and humpback. The humpback whales are considered basically to be local whales; the sperms and fin whales, blue whales, are travelling whales, presumably travelling to the north Pacific. There is, I think it is fair to say, a lot of knowledge yet to be gained about whales and their

habits from a biological point of view, and to know their ultimate destination; but its history here has been that of a marginal industry, and it is still that type of operation. It is greatly dependent upon the markets for oil, which is the prime product of the operation.

Is there anything further I might outline on that?

MR. GUSHUE: No, thank you. Is there any accepted explanation of the severe drop in the salmon fisheries from the peak of 1910 - 1913?

MR. HARRISON: The reference to 1910-1913 was primarily to the Fraser river, and the explanation was the 1913 slide at Hell's Gate, caused by the construction of the railways at that time through the canyon of the Fraser river. The drop was very drastic immediately following that. I think in the brief we give the figures showing the immediate decline after that. With the building of fishways and the application of scientific knowledge to the fishery, it has come back to the figure I mentioned of 56 per cent. I can see no reason why it should not be back to 100 per cent, given time.

The scientific problem, as you know, was related to the fact that the sockeye, which is the fishery under discussion there, has a four year cycle; therefore the results from

experiments do take a period of time to prove.

MR. GRAUER: What has been the experience on the other salmon fishing rivers, tying in with that question?

MR. HARRISON: I am not quite sure that I understand the question.

MR. GRAUER: Has there been any decline in the number of fish in the other salmon rivers?

MR. HARRISON: Yes, there has been in some, and partly on that historical basis we were able to ascertain what these rivers did produce in their natural state. We had on the Skeena river just two years ago a very serious slide which affected that fishery. The fisheries department took very prompt action and pushed a road through the wilderness and went to work on that right away, but obviously there was a considerable loss as the result of that slide before they could get in there to do anything about it. It has affected all cycles which come after it.

MR. GUSHUE: Is the association happy about the programme for river improvement? Do they think it is being carried on expeditiously enough, or that it should be accelerated?

MR. HARRISON: We feel that the work of the scientists and the administration has been good, as we say in the brief. We do

feel this, that they are at a stage now in the knowledge of the fisheries where money expended in the form of these capital improvements such as the ones we have mentioned here would bring very rapid returns. Because of the nature of the control over the fisheries, where private industry has not the right to the river or stream, the only manner in which that can be done is to have money expended in a businesslike manner to make these developments now, because in our opinion the returns will be quite rapid.

Going back many years, this fishery has gone through a number of different types of thinking, I suppose you would call it, as to how there could be control. Upon until 1920 one company operated a hatchery, for example. In return for operating the hatchery they had the fishing rights outside the river, and they were then in a position to spend money on the river in order to reap the results of that work. But that policy went by the boards around 1920 or 1921, and since then it has been accepted that the fishing is open. The fleets have become more mobile, and there are no private preserves for anyone. Consequently developments of this nature would have to be done and should be done by government in the form not of a continuing cost but in the form of an investment to bring about this yield.

MR. GUSHUE: You feel that is a

government responsibility?

MR. HARRISON: Yes, very definitely, because it is one of the areas in which private industry cannot take responsibility. For example, if one company were to spend say half a million dollars on the development of a stream, they would have no assurance they would get any portion of the fish except that portion they fought for competitively with the others; whereas the government, in making it its expenditures and controlling and conserving the industry here, is spending money now on the present volume of salmon. Your percentage cost would not be much greater in doing some conservation work if we were able to double the volume; but to double the volume there has to be a capital expenditure to begin with.

MR. GUSHUE: You were speaking of the herring fishery. The sales on the North American continent, the consumption of herring as a food, has dropped to a startling degree over the last two or three decades. Your figures show that practically 100 per cent of your herring goes into oil and meal, certainly over 90 per cent.

I also notice your reference to the small consumer package helping in some of the other fisheries, the salmon fishery, the halibut and the cod. Has there been any attempt to devise a small consumer package in

the case of herring, say quick frozen boneless herring?

MR. HARRISON: Yes, the market has been examined. Herring in a minor degree are filleted and smoked and canned, but we have not been able to discover any bulk market for that type of packaging you mention.

MR. GUSHUE: You have not tried frozen boneless herring?

MR. HARRISON: I could not say it has been specifically put up, but the market has been examined, and the opinion is that it does not exist.

The drop you refer to is actually from the point of view of canned herring. There were about 1,200,000 cases put up in 1942, but that was during the war and it was put up for war purposes, and that is declining. If that could be brought back, which we have tried at various times, it would be very beneficial to the industry and to the employment situation.

MR. GUSHUE: And there was a very heavy export of salted herring?

MR. HARRISON: Yes. In 1934 about 25,000 tons went to the Orient by way of Japan, Yokohama and Hong Kong, but that fell off in the latter part of the thirties and has never revived since to any extent.

MR. GUSHUE: There was a fairly substantial market for salted herring also, was

there not, which has disappeared; I do not mean only with regard to this area, but generally?

MR. HARRISON: You mean exported from here to the United States market?

MR. GUSHUE: Yes.

MR. HARRISON: Not that I am aware of.

MR. GUSHUE: Perhaps I should have said pickled herring. That market has virtually disappeared?

MR. HARRISON: Yes.

MR. GUSHUE: Just one question about halibut, which fishery is under the international commission. Does that tend to be a very short-term fishery?

MR. HARRISON: Yes.

MR. GUSHUE: Carrying halibut in cold storage for a long period?

MR. HARRISON: Yes.

MR. GUSHUE: There was a reference to attempts at various times to have a limitation, or approaches to the federal government to have a limitation imposed on the number of fishermen. I take it that your association would be opposed to that. You are rather factual about it, and I wondered what the view of the association would be; or is that a fair question to ask?

MR. HARRISON: Perfectly fair. I have read the unions' brief on that subject and

the proposal in more detail which they presented to the government some time ago. Mr. Wrigby just asked me before this meeting what we were going to say about it, and I understood he was going to be on here first and that perhaps we would have heard what he had to say about it.

I think the situation there might be reviewed briefly. The problem as to the number of fishermen in the fisheries has probably been with the industry almost since its inception. There was a commission back in 1910 which tried to allocate the number of fishermen and types of gear to the various plants up and down the coast. The question came up again in 1920, and it has been reviewed almost every time.

If you are going to have something of that kind the first thing any proposition would have to be examined for is to see whether or not it could be worked properly, in the sense that the licence does not obtain a value. For instance, at one time the number of Japanese fishermen was curtailed and licenses were issued to them; but the licences became things that had a value.

MR. GUSHUE: They were negotiable?

MR. HARRISON: They were not supposed to be, but they became negotiable. If you put a restriction on the numbers, there are a lot of questions which have to be asked. Without criticism of what the union is endeavouring

to do, as they stated previously they are endeavouring to maintain a proper livelihood for the number of fishermen engaged in the fisheries, which requires a determination as to what is a proper livelihood. It also requires a determination as to whether you are going to say to people in isolated communities, "It is all right for you to fish, but your sons cannot fish with you unless they get on this list." There are a lot of questions which would have to be asked to determine whether there is a workable solution to the problem.

I think also it leads us to ask such questions as what is the end objective of this licensing system. Is it to create greater efficiency? Are the number in the fisheries now the right number? If it is for greater efficiency, are they proposing that traps be placed where they would be the most efficient?

That is why in dealing with it here we have said that the problem is largely a social one. If someone asked what was the most efficient way of running a large fishery, it is not necessarily the way the fish are being harvested now. You run into social problems; I think every government has found that to be the case.

MR. GUSHUE: Your embargo on fresh salmon at certain times would be an answer to the differential tariff of the United States against

the raw material and the processed material?

MR. HARRISON: That is right.

MR. GUSHUE: To protect the Canadian processor?

MR. HARRISON: Yes. There is canned salmon sold in the United States under certain conditions, but those are conditions of shortage on their side. As an example, if their pack of Puget Sound pink salmon is less than 1,700,000 cases, usually some pink salmon goes across in canned form. If their pack is more than that, it does not.

MR. GUSHUE: I wonder if you would elaborate a little on the statement on page XVI of your summary, where you deal with differential freight rates and say:

"We do, however, protest when other areas, who should normally operate with the same geographical handicap, are given privileges not extended to British Columbia."

Would you expand on that?

MR. HARRISON: Yes. It is that principle with which we are concerned. Just as an example, the distance from Vancouver to Toronto is approximately 2,700 rail miles, and on frozen fish our cost per ton mile is 2.97 cents, using the carload basis on frozen fish. From Halifax to Toronto is 1,100 rail miles, and the cost per

ton mile is 2.05 cents. I am not suggesting that this materially affects our marketing of our product; it is the principle that is involved there which we do not think is correct.

MR. GUSHUE: What would be your solution?

MR. HARRISON: I think probably the commission has heard British Columbia's solution to the freight rate problem; that is, to put us on an equal ton mile basis at least.

THE CHAIRMAN: We also heard a few representations from the maritime provinces.

MR. HARRISON: We just do not like seeing the trend go that way, though we are not too disturbed about what is involved here.

MR. GUSHUE: Have there been any changes in the United States tariff in the last 17 years that have been significant to the British Columbia fishing industry?

MR. HARRISON: Yes. In the salmon tariff there was a reduction from 25 per cent to 15 per cent. Then we were asked by those who were representing us at the GATT conferences as to whether or not we would favour any reduction in accordance with the limitations put on the price by the United States, which was a maximum of 15 per cent, 5 per cent for each year; and we said we would be agreeable to that.

MR. GUSHUE: That is the most important one as far as the British Columbia industry is concerned; salmon?

MR. HARRISON: Yes, on canned salmon. We have a tariff against us on quick frozen fillets of $2\frac{1}{2}$ cents, which is a fairly substantial tariff. The big one, of course, is the one you people on the east coast run up against all the time; that is the 30 per cent on the fish stick production in finished form.

MR. GUSHUE: It does not affect you to the same extent as it does the east?

MR. HARRISON: No, but it prevents us from endeavouring to utilize some of the fish referred to here; that is the groundfish. If we were in a position to manufacture we might be able to do more with that product.

MR. GUSHUE: At any rate, with regard to the canned salmon the reduction has made it easier to export to the United States?

MR. HARRISON: It lowers that differential to some degree.

MR. GUSHUE: Just one more question as a matter of interest. You made reference to the pilchards having disappeared. They disappeared from the waters off California, and so on. Have they come back there now?

MR. HARRISON: They are back there now.

MR. GUSHUE: They are likely to move north, then?

MR. HARRISON: I don't know. Perhaps I can turn to some of my more learned confreres here to give me the answer to that. We do not know the answer to that. They are getting them off California now. Whether or not they will fish them out in that particular stage or whether this fish will travel north, we do not know; but we think the cycles will undoubtedly in time repeat themselves. We have made the same reference to tuna. They may be there, further off shore; and if our biologists find them we would like to get at them.

MR. GUSHUE: Pilchards are one of the hardest types of fish to catch, are they not? They are not as susceptible as some other species?

MR. HARRISON: I could not answer that.

MR. GRAUER: On page VIII of the summary there is an interesting forecast that the salmon fishery can be at least doubled within the next 25 years. Then you say that in arriving at this projection you have taken into consideration, among other things, known conservation practices and new knowledge of the biologists and scientists. I suppose in that particular field, of knowledge of biologists and scientists, there could be a considerable

expansion of knowledge, could there?

MR. HARRISON: Yes.

MR. GRAUER: And presumably if that took place it could affect the forecast?

MR. HARRISON: Yes. We said in our brief, which caused some comment by those who read it, that perhaps we were being pessimistic but we did not necessarily feel so. If some of these practical experiments work out, it could far more than double. If the biologists can find a way to bring back the off-year runs of pink salmon the forecast would be far more than doubled.

MR. GRAUER: This would be a minimum for the next 25 years?

MR. HARRISON: Yes, on that basis.

MR. GRAUER: On research, which the brief stresses, what is being spent now in dollar amount by the federal and provincial governments; that is on research in the fisheries?

MR. HARRISON: I have not the provincial government figures, but I think in the federal field the federal Department of Fisheries expenditures in British Columbia, which involve the department proper and the research board and its many branches, totals \$2,700,000, using the 1953-54 figures. Of that, 26 per cent was spent by the research board, 11 per cent by the fish culture and development branch. In addition the salmon commission takes 5 per cent and the halibut

commission takes 1 per cent; so take 42 per cent of \$2,700,000.

MR. GRAUER: That is for the country as a whole?

MR. HARRISON: That is for British Columbia.

MR. GRAUER: It would be about half that figure?

MR. HARRISON: Yes, roughly half. I would think the fisheries research board would be around \$600,000 on that basis, and about \$300,000 in the other branch.

MR. GRAUER: Does the industry as such devote any funds to general research?

MR. HARRISON: By the term "research" do you mean the biological and technological work?

MR. GRAUER: Yes.

MR. HARRISON: Some of the companies do maintain their own laboratories for technological work. Their members spend a lot of time on the commissions on biological work, and some companies have biologists on their staff; but this field is generally covered by governmental activities.

MR. GRAUER: On the question of markets, the domestic market is about 50 per cent?

MR. HARRISON: Yes, 50 per cent to 60 per cent, varying with the price and the

species available to market. That is for canned salmon.

MR. GRAUER: Is it capable of much development, do you feel; or do you feel the limit has been pretty well reached?

MR. HARRISON: No, we think it is capable of development. When we ran into difficulties in the United Kingdom market we put on a strenuous campaign to sell in Canada, and boosted our sales here very materially, in fact got them up over 900,000 cases.

MR. GRAUER: And there is still a good possibility there?

MR. HARRISON: Yes. The consumption of canned fish in Canada is about four pounds per capita and we feel that could be increased, considering it as a protein food. I am glad the unions are here to hear us answer that question, so they will realize the importance of price.

MR. GRAUER: On page XVIII of the summary you state:

"For this reason we urge the government to act quickly and adequately."

Are all these specific proposals for government action contained in your chapter 10 headed "Government Responsibilities" or do you have any further specific proposals?

MR. HARRISON: No, we have not

incorporated in the brief further specific proposals on it. We believe those in charge of our administration of the fisheries here for the government, and in charge of the research, are much more capable of saying where that money could be best spent for the best results. We do feel that we have this capable administration of scientific staff now. What they need is money spent, with the type of thinking behind it that this is a capital expenditure that will bring returns. I think I am correct in saying that generally in government expenditures, the total expenditure is accepted by the treasury board, or whoever it is, with the idea that a degree of certainty is required greater than you would consider necessary in connection with an industry risk. Here is a field in which we cannot take industrial risks, because we cannot get the returns; but we are suggesting that the government get a little closer to a business-type of thinking.

MR. GRAUER: You told us there was close liason between the industry and the government?

MR. HARRISON: There is. There are industry representatives on the commissions. We work very closely with them in that respect.

THE CHAIRMAN: Thank you very much, Mr. Harrison.

THE CHAIRMAN: Now, is Mr.

Alan Williamson, the vice president of Wood, Gundy & Company here? I think he is going to be kind enough to tell us how we are going to finance all these things. I think, Mr. Williamson, we will mark this Exhibit 95, so we will be able to refer to it.

MR. WILLIAMSON: Shall I go ahead?

THE CHAIRMAN: I think so, please.

MR. WILLIAMSON: As one who has spent his entire business life in raising capital for Canadian development, I consider it an honour and a privilege to be invited to appear before this commission. My comments will be restricted to a brief discussion of the six questions submitted to me by the commission. After giving these comments I will be pleased to try and answer any questions that may be put to me.

As the commission is admirably staffed with economists and statisticians and has available to it all of the facilities of the research staff of the dominion bureau of statistics and of the Bank of Canada, I do not propose to forecast the future by producing figures with respect to past experience in the capital markets.

It was over 40 years ago, in 1914, that I first became associated with Wood, Gundy & Company Limited, then a small firm only 9 years

old, operating a bond business, which type of business was then in its infancy in Canada. Since that time the firm and the investment business in Canada have grown together, and I have gained experience in Winnipeg and Vancouver and in London, England and in Toronto, so I have been exposed to the problems of all classes of borrowers in raising capital in widely scattered areas.

As the commission is also aware, I had the privilege of 4 years in government service during the war, acting as timber controller and rubber controller in the Department of Munitions and Supply, and as administrator of these departments for the Wartime Prices and Trades Board.

I have been asked by the commission to express my personal opinion with regard to the following six questions.

"(1) Are there any classes of deserving borrowers whose needs may not be served adequately?"

There will always be people anxious to borrow who consider themselves deserving borrowers but who are not entitled to borrow based on accepted loaning standards. The many methods of meeting the needs of borrowers include underwriting of new issues of shares or bonds, bank borrowings, direct placements with

investing institutions, mortgages, Industrial Development Bank loans, leaseback deals on buildings, agreements for sale, etc. It is not reasonable for promoters of new business to expect to borrow substantially all of the capital and to retain substantially all of the equity. Generally speaking, the facilities available to borrowers appear adequate to meet most of the requirements, with the possible exception of small businesses not well enough established to have demonstrated ability to stay in business and meet their obligations.

"(2) Are there adequate sources of funds for financing the purchase of older houses?"

As I am not in the real estate or mortgage business I am not well qualified to answer this question. My advice from those in the business is that there is no real problem except by holders of old houses refusing to recognize the depreciation on an old building and not being aware that only a lower percentage could properly be loaned on such houses. The financing of old houses probably appears to be a problem because of the extremely easy terms made available to purchasers of new homes under the housing act. The result is that many people who could be much better suited and at a lower cost in an old house are forced to buy a new house at

higher cost and less suitable because only new houses are available with very small down payments. It would seem to me that there should be enough people under the prosperous conditions that have existed in Canada in recent years who have accumulated sufficient credit or cash to finance the purchase of all attractive older houses available at reasonable prices.

"(3) Will the Canadian sources of venture capital for both small ventures and large be adequate for our special needs?"

The tremendous expansion in Canada in recent years which shows no sign of slowing down, which rate of expansion is the greatest in our history, makes it appear that the sources of venture capital are adequate. The supply of venture capital for the future depends on the views of the owners of the capital as to their prospects of capital gains free of tax. If the government wish this flow of funds for the development of the country to continue, care must be taken to retain confidence in the views of investors that capital gains will not be treated as income in the future.

Canadian sources of venture capital should be large in the future provided opportunities for profit are sufficiently attractive but as

long as Canada continues its present percentage rate of development, venture capital from abroad will continue to be required in substantial volume as well. In the huge capital investment programme of the past 10 years a relatively high proportion of capital from the United States has been venture capital. Broader capital opportunities for greater participation of Canadian venture capital would appear to be a desirable objective for the future. The widespread Canadian interest in such equity issues as Interprovincial Pipe Lines, Gunnar Mines and similar undertakings suggests that more Canadian venture capital could be made available, particularly for development of resources.

"(4) Are there, or will there be accumulations of capital which because of restrictive legislation or institutional practice may not be employed to full advantage in the capital market?"

The two present large accumulations of capital are in the hands of the chartered banks and insurance companies. The legislation covering the investments of the chartered banks has been materially broadened so that bank funds are being more effectively employed in the development of

the country. I feel, however, that the legislation respecting investments of insurance companies and trust companies is too restrictive to be in the best interests of the country as a whole. The Canadian legislation with respect to insurance companies is much more restrictive than the regulations existing in Britain or in certain areas of the United States.

The examples of what I have in mind are:

(a) At the time of the separation of Canadian Industries Limited of Canada into Canadian Industries Limited and Dupont of Canada, Canadian Industries Limited obtained a new charter to take over the share of the business which it was to continue and, by reason of it being a newly constituted corporation, the securities were not a legal investment for insurance companies in Canada.

I might interject that the owners of the shares not only were not allowed to buy them, but had to dispose of what they owned.

THE CHAIRMAN: Were there objections raised? Were there suggestions made for amending legislation, do you know?

MR. WILLIAMSON: Not that I know of.

(b) When General Motors Acceptance Corporation, which is a subsidiary of General Motors Corporation of New York and had conducted a highly successful branch business in Canada, decided to form a Canadian corporation and operate in Canada under this corporate structure, by reason of the fact that the corporation was a newly incorporated company the securities were not a legal investment for insurance companies in Canada.

There again it seems to me that with General Motors debt obligations, it seems ridiculous that the insurance companies could not buy them. There were representations made in regard to this also.

The accumulations of capital in the hands of insurance companies might be employed to fuller advantage in the capital market if amortized valuations rather than market valuations were permitted for municipal and corporation bonds. At present amortized valuations are now applicable only to government of Canada and provincial government bonds. Since the whole market is sensitive to changes in monetary policy the change suggested might lead insurance companies to channel

their funds more in line with the needs of the country for capital development. It seems wrong to me that values of mortgages on real estate are not affected by monetary policy but that values of municipal bonds are so affected. A change such as is suggested would help to broaden the market for municipal bonds which should be desirable for the future because of the huge sums needed for municipal development, and because many smaller municipalities in some areas have found difficulty in financing their requirements. I have heard that some of the insurance companies will not buy the bonds of smaller municipalities because of the changes in valuations, with changing interest rates.

It would also be helpful in the development of Canada to increase the percentage, now only 3 per cent, which insurance companies can invest in securities not qualifying as legal investments. Relative to Canada's rapidly expanding economy and accelerated pace of technological progress the 3 per cent basket may be inadequate, particularly as such a large proportion of the public's funds are channelled into investment through insurance companies.

The trustee acts in some provinces should be revised and modernized so that the immense sums subject to the acts could be better invested and at the same time invested in a manner most helpful to the nation's development.

In British Columbia our act will not permit investment of trust funds in such excellent securities as the first mortgage bonds of our telephone or electrical utilities or in any industrial bond, not matter how well secured; but the act does permit the purchase of such questionable securities as the debentures of villages or school districts dependent on one industry.

Many pension funds which represent an increasingly important collector of capital are restricted to investments legal under the Insurance Act. Anything that is done to improve the Insurance Act would be helpful to pension funds.

The investment trusts are subject to the least restriction and have made the biggest contribution to the equity capital required for the recent rapid development of this country.

"(5) Is the existing machinery for mobilizing capital including the savings of individuals in Canada adequate?"

Using the past 10 years of terrific growth as a yardstick, the existing machinery certainly appears to be entirely adequate.

"(6) What is the probable trend to corporate financing as among debt financing, equity financing and reinvestment of earnings and is this probable trend in the best interest of Canada?"

There is a strong temptation by reason of the right given to charge interest as a deduction before taxes to resort to debt financing to the largest possible extent rather than equity financing. Moreover, in a growing economy there is a strong urge to retain earnings for reinvestment in the business rather than declare these earnings in dividends and permit the individual shareholder to select his own reinvestment. This provides roughly double the sum of money for capital development that is provided by declaration of dividends and the reinvestment of the dividends in new equity financing. This comes about as a result of our double taxation set-up in Canada which is now partially rectified by the 20 per cent tax relief given on payments of dividends to individuals.

Only this week Mr. Claxton suggested some additional items on which the commission would like my comment. Included in these questions is a request for an idea of the size of Canada's capital needs in the future.

This is something I feel incapable of putting into figures, but I am quite sure that the amount required will remain high and obviously will continue to grow as the country develops.

Another question asked is how the present capital system in Canada developed, and my belief is that it grew up as a copy of the best from the English, Scotch and United States systems.

The commission also asked if the introduction of foreign capital is good or bad for this country, and I would answer by saying that our rate of development and our rapid progress would be quite impossible without the assistance of foreign capital.

Another question is whether the Canadian public are in the picture in the financing of Canadian expansion. In this connection I believe that there is a broader public participation in bonds and shares in Canada than in probably any other country, having in mind the extent of our resources. United States underwriting houses with which we are associated from time to time in financing have often expressed their amazement at the large amounts that the Canadian market will take when insurance companies and other institutions are out of the market.

THE CHAIRMAN: Thank you, Mr.

Williamson, for that very thoughtful presentation. We are very grateful to you for expressing your views to us and giving us the benefit of your experience.

I would like to ask one or two questions. Under the first point, are there any classes of deserving borrowers whose needs may not be served adequately, we have heard during the course of the commission's sittings from end of the country to the other the tremendous requirements for capital of the municipalities, both small and large. You have made one suggestion or comment in that connection, that if the life insurance companies were entitled to treat those municipal bonds on an amortized basis of valuation they would be more interested in them.

In the United States, as I understand it, one inducement the municipalities have to get the kind of capital they need is the right to issue tax-free bonds, usually at very low rates of interest?

MR. WILLIAMSON: Yes.

THE CHAIRMAN: Would you think that would be a good practice to introduce in this country?

MR. WILLIAMSON: I agree that the municipalities need to live. About the only market for municipal bonds is the insurance companies, and that is why I directed

my remarks to something to help the insurance companies. Personally, however, I am very much opposed to any type of security in Canada being free of tax. I think when we got rid of our old tax-free government bonds we did a great thing.

THE CHAIRMAN: I refer to the 20 per cent tax credit on dividends, which in a sense was designed to mitigate double taxation.

MR. WILLIAMSON: Oh, yes. I am in favour of that, and more of it. I probably should have interjected before that these remarks I make are purely my own personal views. They do not represent the views of any association or anybody but myself.

THE CHAIRMAN: You are not nearly as badly off as I am. I think I have eight more partners than you have, and they nearly all think differently.

Under the third question you made the statement, in connection with venture capital:

"If the government wish this flow of funds for the development of the country to continue, care must be taken to retain confidence in the views of investors that capital gains will not be treated as income in the future."

Would you care to amplify that remark?

MR. WILLIAMSON: Well, as everybody knows Canada requires an immense amount of equity financing. The development of all these new industries requires a great deal of it. Canadians do not buy common shares for the dividend return. They buy them because they think they are going to make a capital gain. All I am saying is that if anything should happen in the future to make them think there was some change likely to take place which would affect the attitude toward capital gains, there would be a grave effect on the ability to distribute the shares. I am not suggesting that anything wrong has been done in the past.

THE CHAIRMAN: That is what I mean. I wondered if you were dealing with the principle which you have just described, or whether you had in mind some recent references to rulings of the income tax department and that sort of thing.

MR. WILLIAMSON: No, I am very much in favour of people paying their proper taxes.

THE CHAIRMAN: In the next paragraph there is a sentence which reads:

"Broader capital opportunities for great participation of Canadian venture capital would appear to be a desirable objective for the future."

It has been suggested in some quarters that there has been a shortage of good equity securities available to the public. Is that what you had in mind?

MR. WILLIAMSON: Yes, I think that is true. The fact that Canadians have been prosperous; that there are a limited number of companies in which you can put your money; that Swiss and United States and British money has been pouring in, all competing for the same shares, has made them high priced, more so proportionately than United States shares. Really what I am referring to is that there are many large companies foreign owned who could correct the situation very materially if they would allow some Canadian participation.

THE CHAIRMAN: Would you like to expand on that a little?

MR. WILLIAMSON: It hardly requires expansion. Many American companies have Canadian subsidiaries in which there is no Canadian interest. Obviously Canadian citizens would welcome an opportunity to have participation in such companies.

MR. GRAUER: Would you suggest that is a subject for legislation?

MR. WILLIAMSON: No, I do not think so.

MR. GRAUER: Education?

MR. WILLIAMSON: Yes.

THE CHAIRMAN: Under item 4, as to whether there are accumulations of capital which because of restrictive legislation or institutional practice may not be employed to full advantage, you refer to the restrictive legislation concerning life insurance companies particularly?

MR. WILLIAMSON: And trust companies.

THE CHAIRMAN: Dealing first with the life insurance companies, do you think a change in the legislation by itself would do the trick? As I understand it, the industry has not yet fully invested in equities up to the percentage that it is entitled to.

MR. WILLIAMSON: No.

THE CHAIRMAN: You could extend the percentage, but that would not necessarily accomplish what you apparently have in mind here?

MR. WILLIAMSON: Well, to be specific, I think it is a great pity that the insurance companies cannot put money in such a fine company as Mr. Grauer's company.

MR. GRAUER: Hear, hear.

THE CHAIRMAN: They can, of course.

MR. WILLIAMSON: In the basket.

THE CHAIRMAN: What do you mean, in the basket?

MR. WILLIAMSON: They are allowed to put 3 per cent in such companies.

THE CHAIRMAN: But have they invested up to the 3 per cent?

MR. WILLIAMSON: I think they have; not in common stocks, necessarily, but there are other things which go in that 3 per cent too, such as real estate and so on.

If I might say a little more about that, I ran our business in England for over two years and visited the continent and talked to insurance companies in such places as Zurich, Switzerland, as well as in England, and I was very much impressed with the system of the insurance companies there, and I think perhaps there is something to be said for it.

They do not restrict the investing of funds very materially at all. They say, "You have a board of directors who are trying to do the best they can for the policyholders" and leave it to them, and it seems to me unfortunate that we should have a tightly written act which says exactly what you may do, and prevents a board of directors, with access to information in connection with many companies, taking advantage of that information for the benefit of their policyholders and shareholders. They may know of some security that has been in default which is about to pay off, and that is the time to buy it; but they cannot. They may know of some share that has never paid dividends and which is about to pay. They may say today is the day to get into Algoma Steel, which has never paid any dividends; but in our setup you are absolutely

hamstrung.

I would personally think that better results would be obtained for the shareholders and the policyholders in that way; but as I understood it, I was to direct my thoughts to what could be done to help the capital development required for Canada, and I think that would definitely be a way of doing it.

THE CHAIRMAN: As far as the trust companies are concerned, the assets under administration seem to be going up every year, and certainly there is an easy course open to them, which is to put the money into dominion government bonds. If they had greater authority under the legislation I suppose that in itself in time would be sufficient stimulus to get a bigger percentage of the funds invested in other forms of securities. Would you agree with that?

MR. WILLIAMSON: Yes, I do.

THE CHAIRMAN: Before we leave that last point, pension funds perhaps have not as yet become quite so important as sources of capital, although they would seem to be rapidly getting into that position, and it is a question of time before they will become, I suppose, a very important source of capital. That would seem to be a natural source for equity securities, particularly in the company with which the pension is concerned?

MR. WILLIAMSON: Yes. All pension funds that I have had anything do do with --

and I sit on the boards of some -- are set up so that they are allowed to invest in anything a life insurance company can invest in. That is why I tied the two together, because if they improved the life insurance legislation, as to what the life insurance companies could do, they would automatically improve the situation with respect to the investment of pension funds.

THE CHAIRMAN: That is true; but surely the people who drew up those pension funds did not necessarily think to tie them to legislation which might be broadened, to put it mildly?

MR. WILLISON: That is right.

THE CHAIRMAN: In other words the remedy is in the hands of the people who set up the pension funds?

MR. WILLIAMSON: That is true.

MR. GRAUER: Not altogether. They have to be approved by the federal government.

MR. WILLIAMSON: Yes, the plan has to be approved.

THE CHAIRMAN: But that approval, which is an approval --

MR. GRAUER: I think they are quite leery of approving any plan that goes beyond the investments allowed to an insurance company.

MR. WILLIAMSON: I do not know the answer to that, but I suspect that is the reason they are tied in that way, but that it is not necessary to do that in order to get them

approved.

THE CHAIRMAN: Under this question of corporate financing you point out that under the present tax system there is a strong temptation to resort to debt financing to the largest possible extent?

MR. WILLIAMSON: Yes.

THE CHAIRMAN: And you also point out that there has been a great tendency to retain earnings for reinvestment?

MR. WILLIAMSON: Yes.

THE CHAIRMAN: Rather to issue securities and create additional capital in that way. Have you any views as to either of those situations?

MR. WILLIAMSON: Well, I do think that to a degree the tax set-up has caused companies to be less conservative than some of them should have been in the load of debt they have put on; but the country has been so prosperous and all business has been so good that very few of them have been hurt by so doing. They have benefited because of the tax implication, but I think it has been overdone..

Then from the point of view of withholding earnings for reinvestment in the business, it has developed the type of approach I spoke of before, that people buy equities or common shares for capital gain rather than dividends, because the dividends have been pretty

poor in a good many cases for the reasons spoken of. I believe it is better to let a fellow have his own money to lose on his own responsibility.

THE CHAIRMAN: In his own way, and issue more securities for capital?

MR. WILLIAMSON: Yes.

MR. GRAUER: Those two things rather go against each other; that is, if you have people putting on more debt, they will have more earnings available than if they financed expansion through junior types of securities or retained earnings.

MR. WILLIAMSON: That is right.

MR. GRAUER: My impression has been that Canadian companies by and large, presumably, we say, scared by the depression of the thirties, have gone overboard in trying to get rid of all debt, and we now have substantial segments of Canadian industry which has no debt at all. In the utility field, of course, that is not so. It is a different type of industry.

MR. WILLIAMSON: Well, I think those who have had good earnings have paid off their debts, but I think those who have required money for expansion have been more inclined to borrow it than to issue shares.

MR. GRAUER: In the expectation that they could pay it off rather quickly?

MR. WILLIAMSON: Yes, and keep

all the money for the shareholders already in the company.

MR. GRAUER: I was going to take Mr. Williamson into a field about which he was not warned. We have been asked a good deal about the prospects of a steel industry in western Canada in general and here in British Columbia in particular, since we have been holding sessions here.

I know you are associated with -- am I right in saying? -- the beginning of a steel industry, or perhaps you would say a steel industry, in Vancouver.

MR. WILLIAMSON: Yes, definitely.

MR. GRAUER: Your firm deals with scrap and not with iron ore; that is right, is it not?

MR. WILLIAMSON: I would be glad to describe the process if you wish.

MR. GRAUER: Then could you let us know what are the possibilities for an expanded industry? We have heard about the iron in the tailings at Trail, and we have heard about the deposits of iron ore. It has been said by coal interests that the steel industry might be a substantial user of coal, whereas we also know that there are electrical processes in the steel industry.

I do not expect you to remember all these things at once, but perhaps you would

describe the industry that exists.

MR. WILLIAMSON: I am sorry I did not have an opportunity to do my homework on this, but there is a company here in Vancouver called Western Canada Steel Limited, which is a holding company and operates three companies. The first is called Vancouver Steel Company, and it operates an electric furnace out in Burnaby and produces from scrap collected in British Columbia about 42,000 tons of billets per year.

The second company is Vancouver Rolling Mills, that takes the steel billets and through the most modern system in the world, induction heating, heats these billets and rolls them into various sizes. It is a 14 inch mill, and produces anything up to that size.

About 30 per cent of the product of the rolling mill is put through Pacific Bolt Company, which makes nuts and bolts and angles and shapes and spikes for the railways and so on.

That whole operation represents an investment of a little over \$5 million, and it is operating at full capacity, except that the electric furnace is not big enough to keep up with the requirements of the rolling mill. To instal another electric furnace, there does not seem to be enough scrap in sight for it; so that in my opinion, and I think the opinion of my associates in the steel business, the situation

in British Columbia is that we are definitely not yet large enough for a big steel mill using iron ore, and we are too big for the facilities that we have; we cannot supply the market.

We have spent large sums of money having experts come in to survey the market and the whole over-all problem, and I know what I am saying is contrary to what is being said by other people, but we believe that we are the entree into the steel business, that we know more about it than anybody else. We supply all the customers; we supply the provincial government; we make all the types of structural steel that are used in the big buildings and the bridges. We could perhaps double our capacity if we increased our range to larger sizes, but we are just in the transition stage where we are awaiting the day when the market will be large enough. And then, of course, if there is any surplus of steel in Belgium, or Germany or Japan it comes in here quite cheaply, so we must be competitive.

The situation at Trail is definitely a possibility, except that the ore out there is all loaded with sulphur, and the only proportion that is de-sulphurized is when they are using it in the process of making fertilizer. But it would be available; that is definitely a possibility.

THE CHAIRMAN: I think you said

that about 30 per cent of the output of the rolling mill went to the operations of the belt company?

MR. WILLIAMSON: Yes.

THE CHAIRMAN: But where does the balance of 70 per cent go?

MR. WILLIAMSON: It goes to build post offices --

THE CHAIRMAN: It is structural shapes?

MR. WILLIAMSON: Yes; and bridges and so on.

MR. GRAUER: As long as you do not let any other province get in ahead of you.

MR. STEWART: We have had a number of representations that the Industrial Development Bank has not served its purpose but could be made an effective instrument. Would you care to comment on that?

MR. WILLIAMSON: I would be afraid to.

MR. STEWART: All right. The only other question I had was this. Assuming that it is advantageous to have the widest possible participation by Canadians in the ownership of assets, can you see any way in which the savings of the small man, the small person with limited amounts of money, could be channelled more into equity capital?

MR. WILLIAMSON: I do not know whether what I am about to say will answer your

question, but we have just finished selling a small issue of shares of a local company called Straits Towing Company, in the tugboat business. We sold \$800,000 worth of shares, and the average sale is under \$500. We have no difficulty with anybody with a little bit of money making an equity investment. There are no facilities for doing it on the instalment plan in Canada that I know of.

MR. STEWART: You think that as far as the machinery is concerned, it is adequate?

MR. WILLIAMSON: Being in the business, obviously I do.

THE CHAIRMAN: Well, thank you, Mr. Williamson; we are very grateful to you indeed. We will adjourn now until tomorrow at 10 o'clock. There are three presentations to be made tomorrow, the first one being the Vancouver and New Westminster District Trades and Labour Council.

---At 5:20 p.m. the
commission adjourned.

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